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NATIONAL
INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

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INTRODUCTION

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

NATURE, PURPOSE, AND SCOPE
OF THE NIS PROGRAM

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CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Nature, Purpose, and Scope of the NIS Program

Authority for the NIS Program

The National Intelligence Survey (NIS) Program was established pursuant to National Security Council Intelligence Directive No. 3, 13 January 1948. This directive provides that:

An outline of all basic intelligence required by the Government shall be prepared by the Central Intelligence Agency (CIA) in collaboration with other appropriate agencies.

This outline shall be broken down into chapters, sections, and subsections which shall be allocated as production and maintenance responsibilities to CIA and those other Government agencies best qualified by reason of their intelligence requirements, production capabilities, and dominant interest to assume these responsibilities.

This basic intelligence shall be compiled and continuously maintained in National Intelligence Survey to cover foreign countries, areas, or broad special subjects, as appropriate.

The NIS shall be disseminated in such form as may be determined by the Director of Central Intelligence (DCI) and the agencies concerned.

The DCI shall be responsible for coordinating the production and maintenance and for accomplishing the editing, publication, and dissemination of the NIS and shall make such requests on the agencies as are necessary for the proper development and maintenance of the NIS.

Departments or agencies to be called on for contributions to this undertaking may include agencies other than those represented permanently in the Intelligence Advisory Committee (IAC).

Basic Concepts of the NIS Program

The NIS is a concise digest of basic intelligence required by the Department of Defense for strategic planning and high level operational planning, and by the Department of State for use in formulating and executing U.S. foreign policy. It also serves other Government agencies which require it for the accomplishment of their missions. In general, the intelligence contained in NIS is concerned with the relatively permanent features and fundamental characteristics of a country, area, or broad special subject, and covers such fields as the geographical, political, economic, military,

scientific, and sociological aspects of the country or area or the fundamental aspects of the broad special subject.

The NIS Program has two phases: 1) the initial production of NIS on countries or areas in accordance with JCS priorities and Intelligence Agency capabilities and 2) the continuous maintenance of such NIS.

The objective of the first phase is to produce integrated basic intelligence studies of all pertinent aspects of the countries or areas within the limits of available information and intelligence on countries or areas.

The objective of the second phase is to keep up to date the basic intelligence contained in the published NIS, to fill gaps in this intelligence, and to improve the presentation of material in NIS originally produced. It is the responsibility of agencies having dominant interest to place each NIS element actively on a maintenance basis as soon as the element has been initially produced. This phase of the program is to continue indefinitely. Revisions will be published as required.

Both phases of the NIS Program require an over-all collection effort covering all important foreign countries and areas of the world simultaneously.

If information is available to undertake an NIS of lower priority than one on which adequate material is not available, the NIS of lower priority will be produced and will not be held in abeyance pending the availability of material for the NIS of higher priority.

While the aim of the collection effort will be to enable the production of complete and reliable published NIS, it must be recognized that the production and maintenance program requires information in greater detail than the intelligence which appears in the published NIS.

New information will be continuously processed so that the intelligence on hand will be constantly up to date and ready for use.

The NIS Program must be flexible in order to meet the basic intelligence requirements of the Joint Chiefs of Staff. To this end it may be necessary to produce and disseminate separate chapters or sections of any NIS.

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Standard Instructions for NIS

The *Standard Instructions for National Intelligence Surveys* contain outlines of basic intelligence requirements, allocations of responsibility for production, and instructions for the production of this intelligence. These *Standard Instructions* were prepared by a joint committee of representatives of the Director of Central Intelligence and the Chiefs of Intelligence Agencies of the Departments of State, the Army, the Navy, and the Air Force; were concurred in by the Intelligence Advisory Committee; and were approved by the National Security Council.

The outlines and outline guides are so drafted as to cover all the basic intelligence aspects of the most complex foreign country or area. However, the appropriate treatment of any topic included in the outlines and outline guides is determined by the sense in which and the extent to which that topic applies to the particular country or area under consideration. Thus, the outlines and outline guides should be adapted to the country or area on which the NIS is being produced.

The *Standard Instructions* prescribe the basic procedures to be followed in producing and maintaining all NIS. They cannot, however, cover all contingencies. Hence, when cogent reasons exist, the instructions may be modified or supplemented to permit appropriate treatment of any topic.

Content of an NIS

An NIS is divided into chapters, each of which treats a major functional aspect of the country or area under consideration. These chapters are divided into sections, each of which treats a major subdivision of the field covered by the chapter. The section is so designed as to permit it to serve as the basic unit of production and maintenance and so enhance the flexibility of the NIS Program. The NIS chapters are as follows:

Chapter	I	Brief
Chapter	II	Military Geography
Chapter	III	Transportation and Telecommunications
Chapter	IV	Sociological
Chapter	V	Political
Chapter	VI	Economic
Chapter	VII	Scientific
Chapter	VIII	Armed Forces
Chapter	IX	Map and Chart Appraisal

Certain topics involving numerous details are given general treatment in appropriate sections of NIS chapters and full treatment in supplements. Supplements are prepared only if the topic in question is sufficiently important in an NIS Area to warrant this detailed treatment. There are, at present, the following five supplements:

NIS Supplement No. I	Ports and Naval Facilities
NIS Supplement No. II	Air Facilities
NIS Supplement No. III	Telecommunications

NIS Supplement No. IV	Urban Areas
NIS Supplement No. V	Petroleum

The Special NIS on Marine Climate and Oceanography divides the world sea areas into ocean basins. These ocean basins are further subdivided into Parts, each of which is comparable to a chapter in the other NIS. The production unit is a Part, each of which will consist of three sections. Ocean basins are designated as follows:

NIS 104	Atlantic Basin	12 Parts
NIS 105	Pacific Basin	12 Parts
NIS 106	Indian Basin	4 Parts
NIS 107	Arctic Basin	1 Part
NIS 108	Antarctic Basin	1 Part

A gazetteer will be published for each NIS Area.

The geographic areas covered by the NIS are generally defined by political boundaries. In CHAPTERS II (Military Geography), however, areas are determined in terms of natural geographic units.

In some instances, it is desirable to define the geographic area in terms of natural boundaries. For example, since the Iberian Peninsula, including the approaches into the Pyrenees from France, forms a natural geographic concept, it should be considered geographically as a whole. Thus, the geographic treatment of this area would serve as CHAPTER II for both NIS Portugal and NIS Spain.

Conversely, the area included within political boundaries may be so extensive as to embrace several natural geographic units. Examples of such areas are the U.S.S.R. and China. CHAPTERS II for these areas would consist of several Parts, each treating a natural geographic unit.

In addition, it will be necessary to transcend political boundaries in many instances in order to obtain comprehensive treatment of certain functional aspects, such as transportation and ports and naval facilities; and such procedure should be followed wherever necessary.

The scope of each chapter, supplement, and Special NIS is outlined in detail under the Outline Guides in this volume. Chapter and section outline guides in general include initial comments relative to content of the unit as a whole which are not repeated with but are pertinent to the detailed outlines for individual sections and subsections. The following standard definitions apply explicitly to CHAPTERS II-IX and by implication to CHAPTER I:

a) The first section of each chapter is uniformly entitled Introduction. This section is not a summary of the basic intelligence contained in the remainder of the chapter or an explanation of the organization of the chapter. Rather, it presents an analysis of the basic intelligence contained in the chapter. It also presents general aspects which cannot be treated adequately elsewhere in

the chapter. For example, the organization and functions of the high command are covered in SECTION 80 (Introduction to CHAPTER VIII, Armed Forces) because this topic cannot be adequately treated in the subsequent sections of CHAPTER VIII. The chapter outline guides indicate the nature and scope of the treatment to be accorded the Introduction of each chapter.

b) The first subsection of each section is uniformly entitled General. This subsection is provided to permit a proper approach to the treatment of material contained in the remainder of the section.

c) The last subsection of most sections is uniformly entitled Comments on Principal Sources. This subsection is to serve the following purposes:

To provide an evaluation of the principal source material used in preparing the section and thereby inform the user of the general credibility to be accorded the intelligence contained in the section.

To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Summary of agency functions

1. GENERAL

Where one agency is responsible for a section of a chapter or a subsection of a section which is being coordinated by another agency, working level liaison shall be maintained. All communications of a policy or requirements nature to the agency preparing the section or subsection will be passed through intelligence command channels.

In all instances working level coordination among agencies concerned will include the following:

Exchange, where applicable, of drafts of completed draft sections in order to resolve inconsistencies among sections and detect gaps in over-all coverage.

Informal coordination in compiling specific subsections which are assigned as the responsibility of one agency but impinge upon the field of interest of another.

2. NIS COMMITTEE

The NIS Committee consists of representatives of the Director of Central Intelligence and the Chiefs of the Intelligence Agencies of the Departments of State, the Army, the Navy, and the Air Force. The representative of the Director of Central Intelligence is *ex officio* chairman of the committee. It also includes an advisory member from the Joint Staff who shall be thoroughly familiar with the basic intelligence requirements of the Joint Chiefs of Staff (JCS), keep the JCS informed of the progress of the NIS Program, and

keep the NIS Committee informed of changes in the JCS requirements.

The NIS Committee performs the following functions:

Considers and recommends for Intelligence Agency approval over-all policies for the NIS Program.

Determines the scope and treatment of each NIS to be produced.

Allocates responsibility for production and maintenance of NIS in accordance with the intelligence requirements, production capabilities, and dominant interest of the Intelligence Agencies concerned.

Establishes NIS production and maintenance schedules based upon JCS priorities and agency capabilities.

Promulgates procedures and instructions for the preparation, review, editing, and submission of NIS contributions.

Recommends to CIA measures necessary for the coordination of the NIS Program.

3. CENTRAL INTELLIGENCE AGENCY

The Central Intelligence Agency performs the following functions:

Provides over-all coordination of the NIS Program.

Produces those elements of NIS allocated to it for production by the NIS Committee.

Furnishes certain common services which can best be done centrally.

Edits NIS contributions, provides advisory substantive review, and arranges for the publication of NIS.

Disseminates NIS in accordance with Intelligence Agency agreements.

4. IAC AGENCIES

The IAC Agencies (State, Army, Navy, and Air Force) perform the following functions:

Provide a member and alternate members of the NIS Committee. This member represents, and speaks for, the Chief of the Intelligence Agency of the Department from which he is accredited.

Produce and maintain the NIS elements which have been allocated by the NIS Committee as production responsibilities.

Implement collection effort which may be required for NIS production and maintenance.

5. NON-IAC AGENCIES

The non-IAC Agencies perform the following functions:

Produce and maintain portions of NIS when explicitly assigned that responsibility by the NIS Committee or by an Intelligence Agency with the approval of that Committee.

Furnish Intelligence Agencies with material for integration into NIS by those agencies.

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

ALLOCATION OF RESPONSIBILITY FOR
PREPARATION OF NIS

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Allocation of Responsibility for Preparation of NIS

Neither the following allocations nor any interpretation thereof shall negate the basic principle that each department is responsible for the production of that intelligence which is responsive to its departmental mission.

CHAPTER I—BRIEF

Section 10—Introduction

- 11—Strategic Significance of the NIS Area
- 12—Military Geography
- 13—Transportation and Telecommunications
- 14—Sociological
- 15—Political
- 16—Economic
- 17—Scientific
- 18—Armed Forces
- 19—Map and Chart Appraisal

JOINT EFFORT COORDINATED BY CIA

CIA
CIA (with joint assistance)
Army (with joint assistance)
Army (with joint assistance)
State (with joint assistance)
State
State (with joint assistance)
CIA (with joint assistance)
Army (with joint assistance)
CIA (with joint assistance)

CHAPTER II—MILITARY GEOGRAPHY

Section 20—Introduction

- 21—Military Geographic Regions
- 22—Coasts and Landing Beaches
- 23—Weather and Climate
- 24—Topography
- 25—Urban Areas

ARMY—CHAPTER COORDINATOR

Army (with joint assistance)
Army
Navy (with Army assistance)
Joint Meteorological Committee
Army
Army

CHAPTER III—TRANSPORTATION AND TELECOMMUNICATIONS

Section 30—Introduction

- 31—Railway
- 32—Highway
- 33—Inland Waterway
- 34—Petroleum Pipeline (treated in Sub-section 62, C and Supplement V)
- 35—Ports and Naval Facilities
- 36—Merchant Marine
- 37—Civil Air
- 38—Telecommunications

ARMY—CHAPTER COORDINATOR

Army (with joint assistance)
Army
Army
Army

Joint Army-Navy
Navy
Air Force (with Navy participation)
Army

CHAPTER IV—SOCIOLOGICAL

Section 40—Introduction

- 41—Population
- 42—Characteristics of the People
- 43—Religion, Education, and Public Information
- 44—Manpower
- 45—Health and Sanitation
- 46—Public Welfare

STATE—CHAPTER COORDINATOR

State
State (with Army assistance)
State
State
State
Army
State

ALLOCATIONS

JUNE 1951

CHAPTER V—POLITICAL

- Section 50—Introduction
 51—The Constitutional System
 52—Structure of the Government
 53—Political Dynamics
 54—Public Order and Safety
 55—National Policies
 56—Intelligence and Security
 57—Subversive
 58—Propaganda
 59—Biographies of Key Personalities

STATE—CHAPTER COORDINATOR

State
 State
 State
 State
 State
 State (with joint assistance)
 CIA (with joint assistance)
 State (with joint assistance)
 State
 State

CHAPTER VI—ECONOMIC

- Section 60—Introduction
 61—Agriculture and Food

 62—Fuels and Power

 D. Electric power
 63—Minerals and Metals

 F. Construction materials

 64—Manufacturing and Construction

CIA—CHAPTER COORDINATOR

State (with joint assistance)
 State (with the assistance of the Department of Agriculture and the Fish and Wildlife Service, Department of the Interior)
 State (with assistance of the Department of the Interior)
 Army
 State (with the assistance of the Department of the Interior)
 Army

STATE—SECTION COORDINATOR

- A. General
 B. Industrial machinery and equipment
 C. Motor vehicles (including tanks, self-propelled guns, etc.)
 D. Aircraft production
 E. Shipbuilding
 F. Explosives, industrial and military
 G. Guns, explosive devices, and ammunition
 H. Other military equipment and supplies (including war gases and smoke preparations)
 I. Telecommunications, signal and lighting equipment
 J. Chemical industries
 K. Agricultural processing industries
 L. Fibers, fabrics, and rubber
 M. Construction industries
 N. Other industries
 O. Comments on principal sources

State
 State (primary responsibility)
 Army

 Air Force (with Navy participation)
 Navy
 Army (with joint assistance)
 Army (with joint assistance)
 Army (with joint assistance)

 Army (with joint assistance)

 State
 State
 State
 State
 State
 State (with joint assistance)

65—Trade and Finance

State

CHAPTER VII—SCIENTIFIC

CIA—CHAPTER COORDINATOR

- Section 70—Introduction

 71—Electronics

CIA is to produce final draft with contributions from Navy and Air Force; guidance from Army and State.
 CIA to coordinate through the JEIC the final draft based upon contributions from all intelligence agencies.

JUNE 1951

A L L O C A T I O N S

~~CONFIDENTIAL~~CHAPTER VII—SCIENTIFIC (*Continued*)

72—Air, Ground, and Naval Weapons

73—Atomic Energy

74—Biological Warfare (BW)

75—Chemical Warfare (CW)

76—Miscellaneous

CHAPTER VIII—ARMED FORCES

Section 80—Introduction
 81—Ground Forces
 82—Naval Forces
 83—Air Forces

CHAPTER IX—MAP AND CHART APPRAISAL

Section 90—Introduction

91—Selected Maps, Charts, and Plans
 A. General
 B. Physical maps, navigation charts of urban areas
 C. Maps of transportation and communications
 D. Sociological, political, and economic maps
 E. Special armed forces maps
 92—Appraisal of Selected Maps, Charts, and Plans

SUPPLEMENT I—PORTS AND NAVAL FACILITIES

SUPPLEMENT II—AIR FACILITIES

SUPPLEMENT III—TELECOMMUNICATIONS

CIA—CHAPTER COORDINATOR

CIA to coordinate, through SIC working committees where practicable, the final draft with contributions on:

Guided missiles and aircraft from the Air Force;
 Ground weapons from the Army;
 Naval weapons from the Navy.

CIA to coordinate through the JAEIC the final draft with contributions from other intelligence agencies.

CIA to coordinate through JBWIC and JCWIC, respectively, the final drafts based upon contributions from Army and from other intelligence agencies.

CIA to coordinate through JBWIC and JCWIC, respectively, the final drafts based upon contributions from Army and from other intelligence agencies.

CIA to produce final draft based upon contributions from other intelligence agencies.

ARMY—CHAPTER COORDINATOR

Army (with joint assistance)
 Army
 Navy
 Air Force (with Navy participation)

CIA—CHAPTER COORDINATOR

CIA (as coordinating staff for material received from Army, Navy, Air Force, and MATS)

CIA—SECTION COORDINATOR

CIA
 Army, Navy, Air Force, MATS

Army, Navy, Air Force, CIA

CIA
 Army, Navy, Air Force

CIA (as coordinating staff for material received from Army, Navy, Air Force, and MATS)

JOINT ARMY-NAVY

AIR FORCE (with Navy participation)

ARMY

~~CONFIDENTIAL~~

PAGE 3

JUNE 1951

SUPPLEMENT IV—URBAN AREAS

ARMY

SUPPLEMENT V—PETROLEUM

STATE (with assistance of the Department of the Interior)

SPECIAL NIS—MARINE CLIMATE AND OCEANOGRAPHY

NAVY

Section 1—Introduction
2—Marine Climate
3—Oceanography

Navy
Navy (with assistance of the Air Force)
Navy

PAGE 4

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

NIS AREAS

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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SHORT TITLE	TITLE	GENERAL NIS AREA	GEOGRAPHIC AREA FOR CHAPTER II
NIS 32	Arabian Peninsula	Arabian Peninsula, including Saudi Arabia, Kuwait, Kuwait-Saudi Arabia Neutral Zone, Iraq-Saudi Arabia Neutral Zone, Bahrain, Qatar, Trucial Oman, Muscat and Oman, Yemen, Aden Colony and Protectorate.	NIS Area 32
NIS 33	Iran	Iran	NIS Area 33
NIS 34	Afghanistan	Afghanistan	NIS Area 34
NIS 35	India	India, including Jammu and Kashmir, Nepal, Bhutan, and Portuguese and French territories in India, Andaman, Laccadive and Nicobar Islands.	NIS Area 35: <i>Part I</i> —Northern India, including Jammu and Kashmir, Nepal, and Bhutan, the Portuguese territory in northern India, all of Pakistan and the Oman settlement of Gwadar. <i>Part II</i> —Peninsular India, including the Portuguese and French territories in Peninsular India.
NIS 36	Pakistan	East and West Pakistan (excluding Jammu and Kashmir), and including the Oman settlement of Gwadar.	NIS Area 36 (Same as NIS Area 35, <i>Part I</i>)
NIS 37	Ceylon	Ceylon	NIS Area 37
NIS 38	Burma	Burma	NIS Area 38
NIS 39	China	China, including Hong Kong and Macao.	NIS Area 39: <i>Part I</i> —Western China and Mongolia <i>Part II</i> —Manchuria <i>Part III</i> —North China <i>Part IV</i> —South China, including Taiwan, Hong Kong, and Macao
NIS 40	Mongolia	Mongolia (Outer Mongolia or the "Mongolian People's Republic").	NIS Area 40 (Same as NIS Area 39, <i>Part I</i>)
NIS 41	Korea	Korea	NIS Area 41
NIS 42	Thailand	Thailand	NIS Area 42
NIS 43	Indochina	Indochina, the Paracel Islands, Spratley Island and other disputed islands and reefs in South China Sea south of Paracel Islands.	NIS Area 43
NIS 44	British Indonesia	Federation of Malaya, Singapore, Sarawak, Brunei, and North Borneo.	NIS Area 44
			25X6A
NIS 46	Tunisia	Tunisia	NIS Areas 46-48
NIS 47	Algeria	Algeria	NIS Areas 46-48
NIS 48	Morocco	French Morocco, Spanish Morocco (northern Spanish zone in Morocco), Ifni, and International Zone of Tangier.	NIS Areas 46-48
NIS 49	Libya	Libya	NIS Area 49
NIS 50	West Africa	French West Africa, Spanish Sahara (Rio de Oro, including the southern Spanish zone in Morocco), Portuguese Guinea, Gambia, Sierra Leone, Gold Coast, British Togoland, French Togoland, Nigeria and British Cameroons.	NIS Area 50: <i>Part I</i> —French West Africa except territories listed under <i>Part II</i> below, Spanish Sahara (Rio de Oro, including southern Spanish zone in Morocco), Gambia, Portuguese Guinea, Sierra Leone. <i>Part II</i> —The following parts of French West Africa: Ivory Coast and Dahomy and the following other areas: Liberia, Gold Coast, British Togoland, French Togoland, Nigeria and British Cameroons.
NIS 51	Liberia	Liberia	NIS Area 51 (Same as NIS Area 50, <i>Part II</i>)

SHORT TITLE	TITLE	GENERAL NIS AREA	GEOGRAPHIC AREA FOR CHAPTER II
NIS 52	Equatorial Africa	French Equatorial Africa, French Cameroons, Spanish Guinea (including Rio Muni), and Cabinda.	NIS Area 52
NIS 53	Egypt	Egypt	NIS Area 53
NIS 54	Anglo-Egyptian Sudan	Anglo-Egyptian Sudan	NIS Area 54
NIS 55	Ethiopia, Eritrea and the Somalilands	Ethiopia, Eritrea, British, French and Italian Somaliland.	NIS Area 55
NIS 56	British East Africa	Kenya, Uganda, Tanganyika, Zanzibar Protectorate.	NIS Area 56
NIS 57	Rhodesia and Nyasaland	Northern Rhodesia, Southern Rhodesia, Nyasaland.	NIS Areas 57-58
NIS 58	Mozambique	Mozambique	NIS Areas 57-58
NIS 59	Angola	Angola	NIS Areas 59-60
NIS 60	Belgian Congo	Belgian Congo and Ruanda-Urundi.	NIS Areas 59-60
NIS 61	South Africa	Union of South Africa, South-West Africa, Bechuanaland, Swaziland and Basutoland.	NIS Area 61
NIS 62	Madagascar	Madagascar	NIS Area 62
NIS 63	Indian Ocean Islands	All outlying islands in the Indian Ocean, southward to 60° S. latitude, except islands covered in NIS 32, 35, 37, 55, 56, 62, and 100.	NIS Area 63
NIS 64	South Atlantic Island	All outlying islands in the Atlantic Ocean between 10° N. latitude and 60° S. latitude and the South Orkney and South Shetland Island groups, but excluding islands covered by NIS 52.	NIS Area 64
NIS 67	Greenland	Greenland	NIS Area 67
NIS 68	Iceland	Iceland	NIS Area 68
NIS 69	North Polar Area	North Polar Area	NIS Area 69
NIS 71	Guatemala	Guatemala	NIS Areas 71-77
NIS 72	British Honduras	British Honduras	NIS Areas 71-77
NIS 73	Honduras	Honduras, including territory north of the Segovia River and islands possibly subject to Nicaraguan claims.	NIS Areas 71-77
NIS 74	Salvador	Salvador, including small areas claimed by Honduras.	NIS Areas 71-77
NIS 75	Nicaragua	Nicaragua, including territory south of the Segovia R.	NIS Areas 71-77
NIS 76	Costa Rica	Costa Rica	NIS Areas 71-77
NIS 77	Panama	Panama	NIS Areas 71-77
NIS 78	Cuba	Cuba	NIS Areas 78-84: Part I—Greater Antilles, Bermuda and Bahama Is. Part II—Lesser Antilles
NIS 79	Haiti	Haiti	NIS Areas 78-84
NIS 80	Dominican Republic	Dominican Republic	NIS Areas 78-84
NIS 81	British Possessions in the Caribbean	All islands and bays under British sovereignty in the Caribbean, and the Bahama Is. and Bermuda.	NIS Areas 78-84
NIS 82	Dutch Possessions in the Caribbean	All Caribbean islands under Netherlands sovereignty, including part of St. Martin I.	NIS Areas 78-84
NIS 83	French Possessions in the Caribbean	All Caribbean islands under French sovereignty, including part of St. Martin I.	NIS Areas 78-84
NIS 84	U.S. Possessions in the Caribbean	All Caribbean islands under U.S. sovereignty or claim, and islands where U.S. has lease or treaty rights.	NIS Areas 78-84

JUNE 1951

SHORT TITLE	TITLE	GENERAL NIS AREA	GEOGRAPHIC AREA FOR CHAPTER II
NIS 85	Colombia	Colombia	NIS Areas 85-86
NIS 86	Venezuela	Venezuela	NIS Areas 85-86
NIS 87	Ecuador	Ecuador and small area on eastern border disputed with Peru.	NIS Areas 87-88
NIS 88	Peru	Peru	NIS Areas 87-88
NIS 89	Chile	Chile, including Pacific Islands east of 90° W. longitude and islands south of Tierra del Fuego disputed with Argentina.	NIS Area 89
NIS 90	Argentina	Argentina, including river islands disputed with Uruguay.	NIS Areas 90-79
NIS 91	Uruguay	Uruguay	NIS Areas 90-91
NIS 92	Paraguay	Paraguay	NIS Areas 92-93
NIS 93	Bolivia	Bolivia	NIS Areas 92-93
NIS 94	Brazil	Brazil	NIS Area 94: Part I—Southeast Brazil Part II—Northwest Brazil
NIS 95	The Guianas	The Guianas (British, French, Dutch)	NIS Area 95

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NIS 99	Philippine Is.	Philippine Is.	NIS Area 99
NIS 100	Indonesia	Indonesia, including all of the former Netherlands Indies and Portuguese Timor.	NIS Area 100
NIS 101	West Pacific Islands	All islands in the Trust Territory of the Pacific Islands, and the islands of Marcus and Wake.	NIS Area 101
NIS 102	Southwest Pacific Islands	Papua, Trust Territory of New Guinea, British Solomon Islands, New Hebrides, New Caledonia and dependencies, Fiji Is., Tonga Is., Gilbert and Ellice Is. and lesser adjacent islands, but not including islands covered by NIS 96, 97, and 103.	NIS Area 102
NIS 103	South Pacific Islands	Phoenix, Tokelau, Samoa, Cook and Line island groups, and adjacent islands, the French Establishments in Oceania, Pitcairn and adjacent British islands, and Chilean islands west of 90° W. longitude.	NIS Area 103

SPECIAL NIS AREAS

(Oceanography and Marine Climate)

NIS 104	Atlantic Basin	Atlantic Ocean	NIS Area 104
NIS 105	Pacific Basin	Pacific Ocean	NIS Area 105
NIS 106	Indian Basin	Indian Ocean	NIS Area 106
NIS 107	Arctic Basin	Arctic Ocean	NIS Area 107
NIS 108	Antarctic Basin	Antarctic Ocean	NIS Area 108

Next 3 Page(s) In Document Exempt

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

EDITORIAL INSTRUCTIONS

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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JUNE 1951

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EDITORIAL INSTRUCTIONS

CONTENTS

	<i>Page</i>
A. Transmittal of material	1
1. Letter of transmittal	1
2. Manuscript	1
3. Graphic material	1
B. Text specifications	1
1. Typing of text	1
2. Text headings	2
3. References to figures and text	2
4. Quotations and extract matter	2
5. Sample pages	2
6. Footnotes	2
7. Reference to sources	3
C. Tabular specifications	3
1. Tabulations	3
2. Tables	3
3. Typing of tables	3
4. Titles and figure numbers	3
5. Stubs and column headings	3
6. Footnotes and source references	4
7. Conventional entries	4
8. Statistical totals	4
9. Table construction	4
D. Graphic specifications	5
1. General	5
2. Photographs	6
3. Maps	6
E. General	7
1. NIS Supplement specifications	7
2. Classification and control	7
3. Treatment of names	7
4. Technical terminology	7
5. Statistical data	8
6. Return of material	8
7. Editorial style	8

~~CONFIDENTIAL~~

Editorial Instructions

A. Transmittal of material

1. LETTER OF TRANSMITTAL

NIS material delivered to the Basic Intelligence Division (D/B), CIA requires a letter of transmittal (original and 2 copies). The letter itemizes the number of pages of text and table manuscript, table of contents and other typed material submitted, and indicates any omission of material or other deviation from standard procedure. The letter specifies control aspects of material involved. The letter of transmittal also indicates the number of extra copies of insert maps which the contributor desires run without NIS reference lines (the number not to exceed 10 copies of each map except by special arrangement), the minimum classification for each map if run without the NIS references, and any special restrictions concerning additional runs and distribution by CIA for other than NIS purposes.

2. MANUSCRIPT

NIS manuscript is submitted in 5 complete assembled copies. Each of the 5 assembled sets of manuscript includes in sequence 1) title page, 2) table of contents, 3) text, 4) tables, 5) caption list, and 6) list of any border information.

Pagination begins with the first page of text of each Section and is consecutive throughout the manuscript (including each page of the tables, which follow the text in sequence of figure numbers). Pagination is by other means than a numbering machine, which is reserved for use in D/B processing.

Manuscript with more than nominal alterations is not acceptable. Text or tabular material photostatted or similarly reproduced from printed or other material must be in positive print form and legible in approximately typewriter elite size.

The supporting items, typed triple space, are as follows:

TITLE PAGE, containing Chapter or Supplement number and title, Section number and title, and the statement: "This is a preliminary draft of Section _____, NIS _____. It has not been finally

edited or reconciled with other NIS sections and should not be reproduced. This Section has been approved for use in the NIS by the (agency), (month, year). This is the uniform date for the entire section and will appear on each page of the published section."

TABLE OF CONTENTS for each section, including all headings and subheads used in text according to the style given in "Text specifications." For Supplements, or when entire chapters are submitted, a separate table of contents extending through No. 2 heads of all sections also is included. Each section table of contents is immediately followed by a LIST OF FIGURES which lists in sequence all figures with the following details for each: Figure number as determined by sequence in tentative placement, category identification (Table, Photo, Aerial, Chart, Diagram, Plan, Map), and the caption as it appears with the figure or in appropriate short-title form. This LIST OF FIGURES is immediately followed by a contributor statement, as approved by the NIS Committee, showing the agency or agencies contributing to and responsible for preparation of the material.

CAPTION LIST (required for typesetting of all captions). Figure numbers for all tables and graphics are listed in sequence with exact wording of the caption as attached to the figure. When applicable, the list of captions is followed by a border information list, listing in sequence each insert map figure number with exact wording of the border information as specified in "Graphic specifications," and indicating which maps have apron material.

3. GRAPHIC MATERIAL

Graphic material, including photographs, is assembled separately from manuscript, in 4 complete sets with each item in sequence. The 4 copies of each item consist of an original and 3 copies of all black and white material, and 4 color proofs for multicolor graphic material. The original plates of multicolor maps are retained by contributor until receipt of memorandum from D/B. These originals are then forwarded as directed by D/B for final reproduction.

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PAGE 1

JUNE 1951

B. Text specifications

1. TYPING OF TEXT

Text is submitted in 5 copies, typed on one side only, with the original on substantial 8 x 12½ bond paper. Duplicating process may be used if submitted copies are thoroughly legible. Text is typed triple space. All paragraphs without headings begin with 5-space indent. Normal capitalization is used throughout (including headings), without use of continuous capitalization or of underlining except for foreign or other terms to be italicized. The last word of a typed line is always a complete word, avoiding ending any line with a hyphen. Manuscript conforms to the sample pages, with margins as shown. Each manuscript page, as shown, includes in top margin the name of the agency of primary responsibility, date (manuscript completion date, for processing control purposes only), classification, NIS number and section number. The first page of text includes the section number and title. Text pages are numbered consecutively within each section (not using a numbering machine, which is reserved for D/B processing).

2. TEXT HEADINGS

Headings used in NIS text material are as follows:

	<i>(Grade of head, not typed in ms.)</i>
II. Military Geography	(Chapter title)
22. Coasts and Landing Beaches	(Section title)
A. General	(No. 1)
1. Coasts	(No. 2)
a. Northern peninsula — Text follows	(No. 3)
(1) Williams Bay — Text follows	(No. 4)
(a) Vicinity of Port Smith — Text	(No. 5)
1) Seaward Approaches — Text	(No. 6)

Chapter and section titles are centered. No. 1 heads are typed flush with left margin of text; inferior heads are successively indented 5 typewriter spaces. No. 1 and No. 2 heads stand alone; text begins on next line with indentation of 5 spaces and thereafter flush left. Remaining heads each end with space, two hyphens, space; text follows immediately on same line, with succeeding lines beginning flush with left text margin.

Each standard heading includes a title in addition to letter or number. Titles are as brief as feasible. In No. 1 through No. 5 heads, common nouns are not capitalized. No. 6 heads are initial caps except for prepositions, articles, etc.

Headings may stand alone when immediately followed by the next grade of head. For certain material (as in Coasts and Landing Beaches), a heading may be followed on the next line or lines by coordinates, hydrographic chart references, etc. No. 5 and No. 6 headings may be modified when used to introduce a series of similar subsidiary

topics (such as a series of brief descriptive paragraphs on smaller ports).

Numbers used to itemize a series of items within text carry a single parenthesis, e.g., 1).

3. REFERENCES TO FIGURES AND TEXT

Figures (including both tables and graphic material) must be adequately referred to in the related text, using figure numbers assigned by the contributor. Reference may be integral in a sentence, "... as shown in FIGURE 32-16 ...", or parenthetical, "... (FIGURES 42-3 through 42-6) ...". It is often desirable to use the reference flexibly to differentiate types of figures, e.g., "... tabulated in FIGURE 42-7 ..." or "... shown on the map, FIGURE 42-8 ...". Statements such as "... in the following table ..." or "... in the table above ..." are undesirable because the relationship may not be retained in printing. Because figure numbering is subject to change in publication or maintenance, reference to tables or graphic material in other sections or chapters is by abbreviated caption, type of material and section number in which it appears, e.g., "(see population density map, SECTION 41)".

Tentative placement within text of tables and appropriate graphic items (e.g., line cuts) is indicated by large carets with figure numbers on the right margin of text pages (see sample pages). Each figure is caretted only once. Figures expected to follow printed text, such as half-tone illustrations and fold-in maps, are itemized after the last line of manuscript text.

Because subsection numbering and titles are subject to change in publication or maintenance, cross references are made to the highest order of text topic which will adequately indicate where the referenced material will be found. Within sections and especially within lengthy sections, however, references to subsections may be quite detailed if desirable. Another section of the same chapter is referred to by "... (SECTION 81, this chapter) ..." or "... (See section on Ground Forces) ...". Reference to a section of another chapter is as follows: "... (CHAPTER III, SECTION 31) ..." or "... (See Railway) ...".

The words Chapter, Section, and Figure, when followed by identifying number are typed in capitals and lower case.

4. QUOTATIONS AND EXTRACT MATTER

Quotations up to approximately 3 typewritten lines are included in text within quotation marks. Longer quotations, and subordinate material likewise to be printed as "extract" in smaller type, are without quotation marks, indented 5 spaces for all lines and typed double space.

Left Margin 1 1/4"		ARMY-January 1948 (CLASSIFICATION)	NIS 21 Sec-38	Top Margin 1 1/4"
		38. Telecommunications		Right Margin 1"
		A. General		
		During the Japanese occupation telecommunication facilities in Manchuria were rapidly expanded. New radio stations were...		
		B. Domestic facilities		
		1. General		
		Prior to 1933, telecommunication facilities in Manchuria were under the control of several agencies and companies licensed by the Chinese, Japanese, and Russian governments.		
		2. Telephone		
		a. Location of routes of lines -- Telephone land lines form a rather close pattern around Mukden, Chang-ch'un (Hsinking), and Harbin, and radiate to all parts of the country (Figure 38-1)..		Fig. 38-1
		b. Type of construction -- Construction was completed for an underground 28-pair nonloaded telephone cable between Mukden and Antung in 1937 (Figure 38-2). In December 1942....		Fig. 38-2
		3. Telegraph and cable		
		a. Location of routes of lines -- Most of the routes are parallel to railways and highways; lines are also built along the valleys. Practically all the major circuits and most of the other..		
		(page number) (CLASSIFICATION)		
Bottom Margin 1 1/4"				

12 1/2"

8"

SAMPLE PAGE 1

ARMY-January 1948

(CLASSIFICATION)

NIS 21
Sec-38

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1"

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1.7"

The offices and agencies that provided telegraph service in the

China area in 1939 were:

Telegraph and telephone service 244

Telephone stations 232

Telegraph agencies 403

Wireless agencies 62

Total	941
-------	-----

b, Type of construction -- In general, construction of..

4. Radio

a. Radio communications stations -- From 1933 to 1945 the

major radio communications stations were operated by....*

*Itemized information for the period 1940 to 1945 is almost entirely based on captured Japanese documents, but the significant totals are confirmed by U.S. official reports.

b. Broadcasting -- There are several of the more powerful broadcasting stations listed in Figure 38-3.

(1) Number of installations -- The number of these installations is considerably smaller than the total given by the 1939 telegraph offices and agencies' tabulations. It is now believed that, even with full allowance for the new facilities only a few have short-wave transmitters. There is very little information about...

Fig.
38-3

(page number)
(CLASSIFICATION)

Bottom
Margin
1 $\frac{1}{4}$ "

811

JUNE 1951

EDITORIAL INSTRUCTIONS

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5. SAMPLE PAGES

The accompanying two pages are sample pages of text manuscript for the guidance of typists.

6. FOOTNOTES

Footnotes to text matter are kept to a minimum. When footnotes are considered necessary, up to 3 asterisks per page may be used. In manuscript the footnote is inserted on the line following the reference, separated from the text by solid lines above and below; the footnote begins indented 5 spaces from left margin, and is typed double space (see sample pages).

7. REFERENCE TO SOURCES

References to sources are confined as much as possible to the topic Comments on Principal Sources, where the evaluative discussion normally will be followed by an alphabetical listing of principal sources to which consecutive numbers are assigned. If sources are grouped by subject categories, they are numbered consecutively rather than by successive groups. In text, and in both text and figure footnotes, this facilitates brief reference, e.g., ". . . , based on *Source 1* estimates, . . ." or ". . . (*Source 1*) . . ." When only a few principal sources are identified and are not assigned source numbers in the Comments subsection, text or footnote reference thereto is as brief as feasible. A source cited in text but not included in Comments on Principal Sources may be described in necessary detail but as briefly as possible. Author, title of source, and date normally is sufficient, typed in capitals and lower case set off from text by parentheses.

In the numbered listing of principal sources, each item is typed double space and is continuous in the following order and typewriter style:

Author, authors, editor or agency; last name first, capital and lower case, period. Title of book or other separate publication; capitals and lower case, underlined, followed within parentheses by capitals and lower case translation if required, period. Title of article from periodical in quotes, capitals and lower case, comma; followed by name of periodical, underlined, comma; edition, series, part, volume, number, selected pages, year of periodical as necessary, separated by commas in that order, with capital only at beginning of series of items, abbreviated as ed., ser., pt., vol., no., p., period. Arabic numerals used throughout except Roman after pt. Place of publication in capitals and lower case, followed by colon and publishing agency if given, otherwise period. Date, period; n.d. if not dated, period. Total pages if desired. Classification in parentheses, capital and lower case, without period.

When several works by the same author or agency are listed, the author's name is not repeated but is replaced by dashes in subsequent listings.

C. Tabular specifications

1. TABULATIONS

Relatively simple tabular presentations, generally with no stubs, less than 3 columns of data, and not requiring more than a printed column width, are treated as tabulations. Tabulations are incorporated in text manuscript without figure number or title (see sample pages). They are typed double space, with no continuous capitalization or underlining.

2. TABLES

More complex tabular presentations, generally with stub and 3 or more vertical columns of data, are treated as tables. Each table has a descriptive title (caption) preceded by a figure number. Each table is constructed to stand as an entity, because of possible separation from text in publication or use.

3. TYPING OF TABLES

Each table is typed in 5 copies, on one side only, original on substantial bond paper. Duplicating process may be used if submitted copies are thoroughly checked for legibility. Tables are typed double space, with no continuous capitals or underlining in caption, stubs, column headings, or data entries. Tables are typed on 8 x 12½ bond paper whenever practicable. For more extensive presentations, larger paper may be used, if possible retaining the 12½ inch vertical dimension. Several separate 8 x 12½ pages may be used to continue a table. When more than one page is used to present a table or when there is significant relationship between columns in separate tables, in typing it is important to maintain alignment and space relationship of columns on all pages. Each page includes in the margin, as in text pages, the name of the agency of primary responsibility, date, classification, NIS number and section number.

4. TABLE TITLES AND FIGURE NUMBERS

Table titles (captions) are as brief as possible consistent with adequate indication of table content. Date or dates are included in the title unless table content is generalized or in itself provides adequate date information. The area or political name is incorporated when feasible, in adjective form ("Value of French imports, 1945-1950") or in noun form after substance of caption ("Land use, France, 1950").

The figure number which precedes each table title is comprised of the section number followed by a hyphen and the serial number of the table in

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PAGE 3

the sequence of all figures (including all tables and graphic items) within a section, according to caretted location in the submitted manuscript.

5. TABLE STUBS AND COLUMN HEADINGS

Stubs (horizontal descriptive entries normally to the left of vertical columns of data) and column headings are carefully worded and coordinated. Proper selection and description of categories minimizes footnotes and exceptions which require explanation.

In general, the heading at the top of a column covers all material presented in the column without insertion of additional headings farther down the column. The same applies to side heads and lines of data. Where intermediate headings seem necessary, the material generally is presented as separate tables. However, related categories of items (such as apply to various weapons) may be usefully combined in a single table by making column headings more comprehensive and using sub-headings in columns and/or indicating a general change in category. Preliminary consultation with D/B on such matters is advisable.

6. TABLE FOOTNOTES AND SOURCE REFERENCES

Footnotes to tables are indicated by up to 3 asterisks and thereafter by up to 3 daggers (the typewriter symbol # is used for a dagger). These symbols are placed at the left of numerical column data, and at the right of headings, stubs, mixed or reading column data. Footnotes generally are typed double space, under the table, starting indented five spaces from left margin of table. The number of footnotes to tables is minimized by incorporation of the material into related text when feasible, by careful phrasing of stubs and headings, by consolidation in a reduced number of footnotes, or by consolidation in a single NOTE carried as a footnote without symbol.

When source reference or references are considered necessary and apply for a table as a whole, they are indicated by "Data from Source 13 . . ." beginning at the left text margin and typed two spaces below a line at the bottom of the table proper. If a NOTE item is used it precedes the conventional abbreviation *na* and explanation, if used (see conventional entries below), which in turn precedes any symbol footnotes. An entire table taken verbatim from a source (sometimes as the only available data, and not necessarily fully accepted by the contributor), is so indicated in related text, by explanation within the table, or by footnote; in such cases it is generally desirable, so far as feasible, to follow the detailed format of the original material.

7. CONVENTIONAL ENTRIES

To avoid blank spaces in columns of data, the following conventional entries are made as appropriate in table columns:

ENTRY	MEANING
...	not applicable; no footnote used
<i>na</i>	data not available, inadequate data, etc; <i>n</i> and <i>a</i> separated and underlined; until conventional is well established, explained as "Data not available", etc., in footnote
0	indicates zero quantity or reading in columns of uniform data such as weather statistics; no footnote used
<i>none</i>	used instead of 0 when data are not uniform, e.g., to indicate known lack of production of a significant commodity; underline; no footnote used
<i>insig</i>	quantity too insignificant to record; underline; no footnote used

When exceptional items in a column are estimated they are preceded by *est* in underlined lower case, unless symbol and footnote are preferable because of an otherwise appreciably narrower column or exceptional items can be feasibly covered in other footnotes.

Ditto marks are not used in tables. For this purpose *do* in underlined lower case is used. Generally, identical entries in figure columns are repeated. It is likewise desirable to repeat word entries which have significance.

8. STATISTICAL TOTALS

When *na* or *insig* are included with vertical or horizontal data entries for which a total is given that only moderately exceeds the sum of the specific entries, no footnote explanation may be required. However, when the total is exactly the sum of the specific figures, generally it is advisable to indicate that *na* or similar items are not reflected in the total, e.g., "* Totals are of known data" or "approx." When totals are not identical with the sum of specific entries, because of rounding or different sources, indicate by note, e.g., "(Tonnage) figures rounded to nearest (thousand) are not additive".

9. TABLE CONSTRUCTION

Optimum clarity and usefulness require the careful construction of all tables in terms of the nature and purpose of the material and the characteristics of the NIS format.

Column headings normally are typed and printed horizontally. They may be vertical when heading narrow columns of data or generally to facilitate publishing a table in minimum width. Superior or consolidating headings are centered over the appropriate individual column headings.

To avoid repetition of units of measurement after items of latitude, longitude, time, distance, weight, etc., units of measurement (abbreviated as appropriate) are put at the head of column, or centered over appropriate columns. Units common to an entire table (e.g., thousands of metric tons, or percentage of population) are placed in parentheses beneath the table title.

It is desirable, so far as practicable, for a series of tables dealing with common or closely related topics to be expressed in a uniform order of magnitude of units of measurement, e.g., all in thousands of tons or hundreds of tons.

Entries in all columns align horizontally with top line of the corresponding stub.

Vertical columns of figures are aligned on the decimal point, dissimilar figures are centered in the column, and zeros precede the decimal in numbers of less than 1. Examples of various figure items are:

1500
0.15
15.5 - 17.0
insig
30 (daily)

Generally it is not desirable to carry a column in which there are no entries. Use of a column for isolated entries may be avoided by carrying the entries in a "Remarks" column or by consolidation in an explanatory note to the table.

Tables generally should be constructed to avoid extensive use of full-length lines or rules between columns and particularly between horizontal entries. Lines or boxes around column headings preferably are omitted by contributors unless format is well established.

Although contributors are not required to conform to printing requirements when constructing tables, general consideration of such requirements facilitates publication of table material. A printed NIS single-column width accommodates approximately 55 units of characters or spaces. A two-column page width takes approximately 115 units. A two-page spread takes approximately 230 characters or spaces. Two-page spreads tend to present page make-up problems in publication, including separation of tables from related text. Tables which must be viewed from the side of the page, and extended tables on fold-in inserts, generally are not desirable and are used only by arrangement with D/B. In constructing tables for normal column or page-width publication, space allowance must be made for column headings which may be wider than figure entries in columns, and for stubs. When it is apparent that the maximum horizontal lines (allowing for column entries, column headings, stubs, footnote symbols, and adequate space

between columns) will occupy more than the approximate number of spaces available but will not utilize more than a nominal additional width, rearrangement of the table warrants consideration. Vertical printing of heads is one device. When the number of columns exceeds the number of stub entries, the lay-out often may be reversed to make a longer but narrower table. When tables present problems not previously encountered, contributors are requested to consult D/B before final typing.

D. Graphic specifications

1. GENERAL

All graphic materials, such as photographs, maps, charts, graphs, and sketches, regardless of size, are (in addition to numbered tables) designated as figures. Each figure carries a separate figure number comprised of the section number followed by hyphen and serial number of the figure in the sequence of all figures within the section.

The page size of the printed NIS, including binding and other margins, is 9¼" by 12⅞". The type is set in two 3½" columns spaced ¼" apart. Figures of column width are printed 3½" wide, and 2-column figures are 7¼" wide. The maximum height of such figures including space for caption is 9¼".

All graphic items larger than page size are treated as fold-in inserts. The maximum paper size used for NIS inserts is 23¼" V x 39¾" H. The horizontal dimension normally includes a 9¼" apron.

Figures are prepared to fit NIS indicated dimensions. Care is required in laying out correct proportions and in selecting sizes of symbols, patterns, lines, and lettering to allow for reduction commensurate with that permitted by other features of the figure. When a specific amount of reduction is desired, it is so marked outside the border. Otherwise, the amount of reduction will be decided by D/B.

All charts, graphs, maps and other graphic material to be printed with text are constructed as black and white linecut figures of page size or less. Photographs and other figures requiring halftone reproduction normally will be published on coated paper inserts of page size (excepting large panoramas or mosaics which may be run as fold-in inserts), grouped immediately following text and table manuscript of each section. Multicolor graphics normally will be inserted at the end of each section.

All figures, except insert maps, are accompanied by captions (in lower case and normal word capitalization) which are carefully worded to be briefly but adequately descriptive. The first line of the caption carries the figure number followed by identification of the subject or brief descriptive phrase;

succeeding lines add appropriate amplification, including direction of view and indication of the date (or absence thereof, by "Date unknown") of photographs. Captions are firmly attached to figures, affixed to permit reading of the caption while viewing the figure but not obscuring the figure image. Captions must be legible but need not be drafted since all captions are set in type.

Charts or graphs do not carry titles or caption material (as distinct from explanatory legend material) within the figure image. In the case of a specially constructed chart or graph, source and date of information may be drafted within the figure.

All insert maps carry the title, legend, source and date of source, and other essential caption information drafted within the title box or headline. Border information, indicated outside the map border in non-photographic blue but not drafted because it will be set in type, is as follows: Upper left corner—agency responsible for map content, and date to be carried by the section as a unit; center top—NIS Area number; upper right corner—classification; lower left corner—file number and agency responsible for actual map construction (unless the latter is identical with material in upper left corner); center bottom—abbreviated map title; lower right corner—figure number.

It is not necessary that all maps or photographs be oriented with north at the top, but the position of north is clearly indicated by means of a north arrow, coordinates, or caption. Names, symbols, and similar details of figures are oriented for reading from the bottom of the page. In exceptions where figures must be viewed from the side of the page, details of the figure are oriented for reading from the right-hand side of the page.

Printed "stick-up" is preferred for symbols and lettering. However, Leroy lettering is permissible. Freehand lettering and symbols are to be avoided except in such instances as the inclusion of an existent, printed map or sketch.

It is frequently desirable for graphic material, such as large-scale aerials of airfields, to be accompanied by small-scale line-cut orientation or location maps.

2. PHOTOGRAPHS

Only clear and distinct photographs are acceptable, and original prints are supplied insofar as possible. Except where the original is unwieldy, prints are supplied at the same scale as originals, including suggested cropping to be undertaken in D/B processing.

High-altitude aerial photographs carry a north arrow and bar scale drafted on the face of the print. When a photograph originally has foreign annota-

tions on the face of the photograph, the annotations are retained and accompanied by translation or explanation. Where feasible, the translation is added to the face of the print in the form of a key or legend; where space is not available or a key or legend is not adequately descriptive, the translation or explanation appears in the caption or on a separate typed sheet attached to each copy of the print.

Instructions for selection and preparation of photographs are set forth in NIS supplementary instructions.

3. MAPS

All NIS maps are carefully selected and constructed in terms of the purpose and subject material of a map or plan, content and positional integration with text, suitability of color or other differentiation, and all feasible uniformity in layout, lettering, and other drafted elements.

All maps have a headline and border, a legend centered under the map title, a bar scale centered beneath the legend, and the classification centered beneath the scale. Legends clearly define all symbols not self-explanatory or generally understood from common usage. A direction indication, either coordinates or a north arrow, is included. Maps prepared as a series (e.g., port and town plans) have consistent treatment throughout in type style, zipatone patterns, title and legend layout. Non-varying plastic (e.g., dyrite, vinylite) is preferable for the construction of color plates, to facilitate accurate registry in printing.

A map designed as a black and white line drawing, page size or less, is preferable for many NIS purposes because it can be printed adjacent to the related text. When information cannot be adequately presented in black and white, limited use of one additional color for such maps is possible, upon consultation with D/B.

A Standard Base Map for each NIS Area is prepared and distributed by Geographic Division, (D/G), CIA in the following forms: Black and white and composite color copies on paper; composite black line and black line copies of each color separation plate on plastic (dyrite). Specific instructions concerning reduction, sizes, etc., are distributed with the base map for each NIS Area.

Contributors are responsible for drafting their own overlays, which are keyed to the base plates of NIS Standard Base Maps.

In addition to the Standard Base Map a small-scale Page Size Base Map is prepared for each NIS Area. This map is available to contributors in black-line and non-photographic blue, paper copies. Black-line maps or color overlays are prepared by drafting directly on these bases.

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For purposes where base maps are not applicable (such as port plans), contributors are responsible for compiling and constructing their own maps. Contributors lacking necessary cartographic facilities should consult D/B.

Fold-in maps are printed with a page-size apron, to permit full view of the map as the text is read. This apron can be used for printing information additional to that contained in the legend, such as lists of installations or regions. Such information is submitted on a separate typewritten sheet, a copy of which is attached to each copy of the map. Printed material is not carried on the back of a map.

E. General

1. NIS SUPPLEMENT SPECIFICATIONS

Preparation of text and graphic material for NIS Supplements generally conforms to the indicated procedures for other NIS material, with such modifications as are developed to meet the requirements of the Supplements.

2. CLASSIFICATION AND CONTROL

NIS textual material is classified independently by section. All pages of each section uniformly carry the highest classification of material in the section. All material, however, carries at least a RESTRICTED classification. Tables of contents, caption lists, all tables, and all graphics intended to be printed within text, carry the uniform section classification and are so stamped when submitted. Insert maps or other insert graphic items (including photographs) are not governed by the over-all classification, but are individually classified as appropriate.

The agency of primary responsibility is required to indicate any control aspects of submitted material.

All Comments on Principal Sources for all NIS are controlled for "U.S. Officials Only". Each page of that portion of manuscript is so stamped, top and bottom. The control for Comments on Principal Sources as such does not govern for related NIS material and need not be specified in the letter of transmittal.

Certain NIS Areas, as approved and specifically listed by the NIS Committee, are controlled for [REDACTED]. Certain other NIS Areas, as approved and specifically listed by the NIS Committee, are restricted by control for "U.S. Officials Only". All NIS material relating to such Areas, regardless of the content of the material, is correspondingly controlled. Each page of manuscript and each unit of graphic material is appropriately stamped, top and bottom. All such material delivered to D/B carries a cover sheet

specifying control, and the control requirements also are indicated in the letter of transmittal.

When any element or portions of NIS material (other than Comments on Principal Sources) are controlled for reasons other than the approved control character of the Area, the entire section involved is controlled. Each page of manuscript and each unit of graphic material is appropriately stamped, top and bottom. All such material delivered to D/B carries a cover sheet specifying control, and the nature of and occasion for the control requirements are indicated in the letter of transmittal.

3. TREATMENT OF NAMES

Geographic names used in the NIS are those approved by the United States Board on Geographic Names (BGN). Preliminary gazetteers are issued to contributors for use in the preparation of text and graphic materials. Pending publication of a pertinent gazetteer, or in the case of names not covered by a published gazetteer, lists of names are submitted according to NIS supplementary instructions.

English conventional names are used insofar as they are approved by BGN. The approved native name is added in parentheses the first time the conventional name is used in a section, and thereafter as desirable for clarity. It is desirable to use the native name in parentheses after the conventional name on maps whenever practicable.

Approved native names are used where conventional English names are not provided. Translation of generic parts of native names (except when the meaning is apparent) is given, in parentheses or in running text if feasible, the first time a generic appears in any segment of text. As a reader aid, English generics may be interspersed in text.

All terms referring to man-made features, such as Small Boat Harbor, are in English. Military regions or other regions arbitrarily designated for convenience in presentation are in English and are not required to be identical with BGN approved versions.

Consistency in the use of the conventional or the native name for the same feature is maintained throughout each chapter.

In lists of towns and cities, coordinates are given for each of two or more places having identical names.

4. TECHNICAL TERMINOLOGY

When scientific names are appropriately used in the interest of accuracy, if possible they are preceded by a common name or common name generic; e.g., the colon bacillus (*Escherichia coli*), malaria mosquitoes (*Anopheles maculipennis*, A.

hyracanus). The scientific names are enclosed in parentheses and marked for italics in every case. In a paragraph discussing malaria mosquitoes, however, italicized scientific names may be used without a preceding common name or generic. Scientific family names (names ending in -idae, as Stomatidae) are capitalized but not italicized.

Special-use terms, such as names of military regions, are capitalized (e.g., the Kazakh Hill Country) to clearly maintain identity.

5. STATISTICAL DATA

Statistical data normally are expressed either in U.S. units of measure or in the metric system, and are consistent within a section or the largest NIS unit feasible, except to conform with common usage, as in discussing 75 mm and 3" guns. All contributions, should clearly indicate what system is used, in tables as well as text. When different measurement systems unavoidably appear together in text (e.g., statute and nautical miles) they must be clearly differentiated. In the case of areas where available maps or charts use varying measurement systems, the text is expressed in U.S. units with metric conversion following in parentheses, and accompanying maps using extensive metric annotations in their original form carry a conversion table. Both U.S. and other measure-

ments may be given, as in the case of a table, when contributing to utility.

Measurements are expressed in terms consistent with the inherent or required degree of accuracy, (e.g., 2,340 miles of coast, 16' 6 1/4" bridge clearance). Conversions are exact when appropriate; a rounded original figure is not converted into an inconsistently exact figure; rounded conversions may be used with a modifying "about" or "approximate". Units of measurement with varying meanings are clearly defined, e.g., statute miles or nautical miles, short tons or long tons. Both quantity and value may be given when useful for indicating relative importance. In financial data, conversion factors with date are included.

6. RETURN OF MATERIAL

Detailed procedures governing the return of submitted material are established in NIS supplementary instructions.

7. EDITORIAL STYLE

Development of style for all forms of NIS content is a continuing and coordinated result of contributor and D/B processing of the various types of material. For all matters of style not so developed, and not indicated by specific D/B instructions, the current Government Printing Office Style Manual governs.

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER I

BRIEF

Section 10 Introduction
Section 11 Strategic Significance of the NIS Area
Section 12 Military Geography
Section 13 Transportation and Telecommunications
Section 14 Sociological
Section 15 Political
Section 16 Economic
Section 17 Scientific
Section 18 Armed Forces
Section 19 Map and Chart Appraisal

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Chapter I - Brief

OUTLINE

- | | |
|--|--|
| SECTION 10. INTRODUCTION | SECTION 15. POLITICAL |
| SECTION 11. STRATEGIC SIGNIFICANCE OF THE NIS AREA | A. General |
| SECTION 12. MILITARY GEOGRAPHY | B.-X. Succinct summaries of salient features |
| A. General | Y. Comments on principal sources |
| B.-X. Succinct summaries of salient features | SECTION 16. ECONOMIC |
| Y. Comments on principal sources | A. General |
| SECTION 13. TRANSPORTATION AND TELECOMMUNICATIONS | B.-X. Succinct summaries of salient features |
| A. General | Y. Comments on principal sources |
| B.-X. Succinct summaries of salient features | SECTION 17. SCIENTIFIC |
| Y. Comments on principal sources | A. General |
| SECTION 14. SOCIOLOGICAL | B.-X. Succinct summaries of salient features |
| A. General | SECTION 18. ARMED FORCES |
| B.-X. Succinct summaries of salient features | A. General |
| Y. Comments on principal sources | B.-X. Succinct summaries of salient features |
| | Y. Comments on principal sources |
| | SECTION 19. MAP AND CHART APPRAISAL |
| | A. General |
| | B.-X. Succinct summaries of salient features |

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

A conventional CHAPTER I should be a succinct presentation of the salient basic intelligence aspects of the NIS Area as a whole. It should present a clear, concise, over-all view of the principal factors concerning the NIS Area under consideration and, while stressing succinctness, should contain sufficient detail to render it adequate within itself to serve as the basis for initial strategic planning. More specifically, CHAPTER I should accomplish the following:

Present a clear over-all view of the NIS Area concerned.

Not only present the salient basic intelligence aspects of the NIS Area concerned but also evaluate the significance of these aspects.

Integrate in any one section those aspects of other sections which serve to enhance the meaningfulness of the first.

The presentation should be made through the medium of succinct textual discussions supplemented by comprehensive graphic aids wherever practicable. The text may be used to interpret and augment intelligence portrayed graphically but should not repeat such intelligence.

SECTIONS 12 to 18, inclusive, of CHAPTER I will be prepared by the agencies which produce the corresponding NIS CHAPTERS II to VIII, inclusive. SECTIONS 10, 11, and 19 will be prepared by CIA with joint assistance and approval.

CHAPTER I will be published as a complete chapter. No CHAPTER I will be produced until CHAPTERS II-IX, inclusive, have been completed and have been edited by CIA. The cut-off date for all sections of CHAPTER I will be that of the latest produced of CHAPTERS II-IX. Preliminary drafts

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PAGE I-1

of CHAPTER I sections, at least containing a summary of the salient basic intelligence aspects of the Chapter concerned and preliminary graphics, will be drawn up shortly after the completion of the CHAPTERS II-IX to which they pertain and submitted to the CHAPTER I Subcommittee for preliminary processing.

To enable the preparation of SECTION 10, each IAC Agency will submit to CIA a draft setting forth the Agency's version of its aspects of SECTION 10 and these drafts will then be integrated by CIA into an over-all draft of the section to be approved by the IAC Agencies.

Section 10. Introduction

This Section is the medium for explaining to the user, among other items, the following:

- 1) The purpose of the NIS
- 2) The relation of CHAPTER I to the other NIS Chapters
- 3) The significant practices used in the NIS such

as, standard names, standard base maps, and cross references

- 4) Any special treatment or omission of intelligence applicable to the NIS under consideration
- 5) A complete table of contents for all chapters of the NIS

Section 11. Strategic Significance of the NIS Area

This Section should give the reader an over-all appreciation of the basic intelligence aspects of the NIS Area. It should be designed to impress the user from the outset with the more permanent strategic significance of the area but to avoid purely temporary strategic estimates. In order to accomplish this purpose, SECTION 11 should be based upon the intelligence set forth in SECTIONS 12-19 and integrated so that the basic strength and the weakness of the country become apparent. Only those elements of basic intelligence which are required to portray the strategic significance of the particular area should be included.

Each SECTION 11 must be custom made to fit the area under discussion, and no prescribed topic outline can be set forth. With the exception of the section title no topic headings will be inserted. The opening paragraph, however, shall state very briefly the conclusions drawn from what follows in the remainder of the section and draw attention in a few words to what is strategically important about the area. For instance, it might be appropriate to state that a specific country is important from the strategic viewpoint because of its key geographical location in a certain part of the world, any important strength factors, and the principal weaknesses.

The remainder of SECTION 11 should be an integrated portrayal discussing the important elements of the country from which are drawn the conclusions in the first paragraph. The discussion should include the strategic significance to be attached to the geographical location and significant air distances to important localities in other areas, and, where applicable, the significance of the NIS Area militarily, politically, sociologically, scientifically, and economically. For instance, the country may have a key strategic location and have political, sociological, and economic, but no scientific or military significance. If so the significant but not the insignificant features would be included in the discussion. No attempt should be made to introduce elements not pertinent to the conclusions.

In conjunction with the text there should be a composite map portraying the principal basic intelligence elements susceptible to such portrayal.

At the end of SECTION 11 of each NIS there shall be an editorial note stating that SECTIONS 12-19 which follow correspond to CHAPTERS II-IX. In the event that a whole Chapter, or Section of CHAPTER I, of a particular NIS is to be omitted, a statement to that effect, together with the reasons for such omission, shall appear.

JUNE 1951

B R I E F

Sections 12-19

SECTIONS 12-19 are summaries of the corresponding NIS Chapters, as follows:

Section 12	Military Geography	Chapter II
Section 13	Transportation and Telecommunications	Chapter III
Section 14	Sociological	Chapter IV
Section 15	Political	Chapter V
Section 16	Economic	Chapter VI
Section 17	Scientific	Chapter VII
Section 18	Armed Forces	Chapter VIII
Section 19	Map and Chart Appraisal	Chapter IX

SECTIONS 12-19, inclusive, will provide an orderly arrangement of supporting evidence for SECTION 11 and a concise summary of the significant factual and interpretive conclusions evolved in CHAPTERS II-IX. They will thus ensure the reliability of SECTION 11, and at the same time, fill the need for a usable digest of the substance of the NIS.

Each section should always include Subsection A, "General" and such other sections as may be necessary for proper treatment of the principal elements of that topic. There should be a final subsection, Comments on Principal Sources, except in SECTION 19 which does not require this treatment.

A. General

An over-all appreciation of the salient features of strategic significance which are included in the Chapter under discussion. This Subsection is not intended to be a mere summary of what is included in the following subsections but should be a succinct analysis of the most important elements of the topic as a whole. The significance of the basic intelligence aspects should be included and also

those aspects of other sections should be integrated which serve to enhance its meaningfulness. The contributing agencies may include such strength and weakness factors as the agencies deem appropriate for an adequate presentation.

B.-X. Succinct summaries of salient features

Each subsection is to be a succinct summary of the salient topics covered in one or more of the sections of the corresponding chapter of the NIS. Should one or more sections of any given chapter be omitted for a particular country or be considered of insufficient importance to warrant summarizing in CHAPTER I, they should be omitted in CHAPTER I treatment. For example, since Switzerland has no seacoast, CHAPTER II of that NIS would not contain SECTION 22, COASTS AND LANDING BEACHES; and no corresponding subsections would appear in CHAPTER I. Also, where deemed appropriate, several sections of the relevant chapter may be summarized in a single subsection of CHAPTER I. For example, it might be feasible in a particular NIS to summarize in a single subsection of CHAPTER I the salient transportation factors regarding roads, railroads, and inland waterways.

Y. Comments on principal sources

Comprehensive evaluation of the basic intelligence contained in the chapter under consideration, including the pointing out of significant gaps or deficiencies and the general credence to be attached to the subject matter. In view of the inherent nature of the material appearing in SECTION 19, it will not include this Subsection.

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STANDARD INSTRUCTIONS

CHAPTER II

MILITARY GEOGRAPHY

Section 20 Introduction
Section 21 Military Geographic Regions
Section 22 Coasts and Landing Beaches
Section 23 Weather and Climate
Section 24 Topography
Section 25 Urban Areas

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Chapter II - Military Geography

OUTLINE

SECTION 20. INTRODUCTION

- A. Location, size, shape, and boundaries
- B. Dominant geographic elements
- C. Strategic areas
- D. Approaches and internal routes

SECTION 21. MILITARY GEOGRAPHIC REGIONS

- A. General
- B. Regional analysis: Regions A, B, etc.

SECTION 22. COASTS AND LANDING BEACHES

- A. General
 - 1. Summary
 - 2. Maps and charts
 - 3. Criteria for beach selection
 - 4. Beach tables
 - 5. Reliability index
 - 6. Glossary
- B. Nearshore oceanography
 - 1. General
 - 2. Tides and currents
 - 3. Sea, swell, and surf
 - 4. Coastal bottom sediments
 - 5. Biology
- C. Sector 1
 - 1. Subsector 1-A
 - 2. Subsector 1-B
 - 3. Subsector 1-C, etc.
- D. Sector 2
- E. Sector 3; etc.
- X. Comments on principal sources

SECTION 23. WEATHER AND CLIMATE

- A. General weather and climatic conditions
- B. Weather and military operations
 - 1. Air operations
 - 2. Air-ground operations
 - 3. Ground surface operations
 - 4. Amphibious operations
- C. Comments on meteorological services
- D. Climatic tables
- E. Comments on principal sources

SECTION 24. TOPOGRAPHY

- A. General
- B. Descriptive analysis
 - 1. Landforms, relief and drainage pattern
 - 2. Drainage characteristics
 - 3. Water resources
 - 4. Soils
 - 5. Lithology
 - 6. Vegetation
 - 7. State of the ground
 - 8. Culture features
 - 9. Special physical phenomena
- C. Military evaluation
 - 1. Cross-country movement
 - 2. Constructional aspects
 - 3. Other military aspects
- D. Comments on principal sources

SECTION 25. URBAN AREAS

- A. General
 - 1. Urbanization
 - 2. Main characteristics of urban areas
- B. Principal urban areas
 - 1. Key strategic urban areas
 - 2. Other selected urban areas
- C. Comments on principal sources

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OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

The six sections of CHAPTER II cover the strategic, regional, and topical aspects of the military geography of the NIS Geographic Area. Clear distinction between these three aspects of military geography is essential to the orderly preparation of these sections and to the efficient use of the chapter.

SECTION 20, INTRODUCTION, furnishes a strategic appreciation of the NIS Geographic Area as a whole in relation to its surroundings. The Section is a broad evaluation and although based in considerable part on SECTION 21 has much wider scope, including discussion of interrelationships between regions, and evaluations of external approaches, strategic areas, and internal routes. It should contain one or more over-all intelligence maps depicting such essential elements as strategic areas, coastal and other approaches, barriers to movement, and corridors and passes favorable to movement.

SECTION 21, MILITARY GEOGRAPHIC REGIONS, is an integration and analysis of the key military aspects of SECTIONS 22 through 25. It presents for each region the significant elements treated in these sections in terms of their combined effects on military operations, avoiding over-all strategic considerations on the one hand and unnecessary repetition of topical information on the other. Presentation may be by text, tables, and maps. For each region, the text summarizes and evaluates in terms of military significance the outstanding military geographic characteristics of that region; the text is

supported by individual regional tables, based on more detailed material in SECTIONS 22 through 25, presenting the environmental characteristics and military evaluation of the region and of any subregions and/or distinctive areas into which it is divided. Intelligence maps and other graphics present military analysis of the environmental factors of each region, subregion, or group of regions.

SECTIONS 22 through 25 (and SUPPLEMENT IV) comprise the detailed topical treatments of the subject matter necessary for NIS purposes. Within each topic or subtopic the material is organized on a regional or locality basis, as for individual sectors or subsectors of coast, regions characterized by similarities of climate, terrain, soil, or vegetation, and individual urban areas.

The outline presented is designed to provide a basis for appraisal of the military significance of the geography of any NIS area. It is intended to be sufficiently flexible to be adaptable to any peculiar situation that the authors of CHAPTER II may encounter.

Each topical heading in the outline must, however, be considered by the authors. As indicated in the guidance for each section, adequate latitude is provided to permit presentation of each topic in the clearest and simplest form, where alternative forms of presentation are practicable.

In the event that modification of the outline, or a part thereof, is considered by an author to be desirable for a particular NIS Area, the proposed modification will not be made without prior approval by the Chapter Coordinator.

Section 20. Introduction

This Section is prepared by Army from material provided by all contributors to CHAPTER II. It is designed to provide the reader with a succinct evaluation of (1) the external geographic relationships of the NIS Geographic Area and (2) its dominantly significant internal geographic characteristics. The Section will be prepared after SECTIONS 21 through 25 have been completed. It will not, however, be an abridgement of either these sections or of SECTION 12 of CHAPTER I. Photographs of especially significant aspects of military geography covered by SECTION 20 will be included as pertinent.

A. Location, size, shape, and boundaries

The significant aspects of the location, size, shape, and boundaries of the NIS Geographic Area as a whole will be presented in integrated paragraphs without topical headings, supported by 1) a map on which the NIS Geographic Area is centered on an azimuthal projection and on which concentric circles of air distances are included and 2) a map demonstrating the comparative areas of the NIS Geographic Area and of the United States or North America.

B. Dominant geographic elements

All facts of the environment as presented in SECTIONS 21 through 25 will be considered by Army in preparing this discussion, and those environmental elements that are dominantly significant will be treated in integrated statements supported by one or more over-all intelligence maps and the minimum number of maps from SECTIONS 21 through 25 that are considered desirable to demonstrate the significance of the selected factors.

C. Strategic areas

Each strategic area of the NIS Geographic Area will be defined and briefly described by Army on the basis of the applicability of one or more of the following factors (or other pertinent factors) which are of national or international significance: criti-

cal and/or key industries (especially military end-products plants); critical and other strategically significant mining developments and mineral resources; key transportation and communications centers and facilities; military installations including key offensive, defensive, and supporting facilities; population concentrations (ethnic, religious, social, including significant minorities); key terrain features (passes, corridors, beaches, air-drop sites); food resources, including production and storage centers; etc. Strategic areas will be delimited on a map with the approaches to and internal routes of the NIS Geographic Area.

Strategic, for the purposes of evaluating strategic significance in the NIS Geographic Area, is defined as: pertaining to the implications of any of the above factors upon a nation's developing and using political, economic, and psychological means and/or armed forces during peace or war to afford the maximum support to national policies, to increase the probabilities and favorable consequences of victory, and to lessen the chances of defeat.

D. Approaches and internal routes

Evaluations of the air, sea, and ground approaches to the NIS Geographic Area as a whole will be prepared by Air Force, Navy, and Army respectively and coordinated by Army. Air approaches will be presented on a quadrant basis. All approaches will be shown in suitable manner on a map showing the strategic areas and internal routes of the NIS Geographic Area. Internal routes will be evaluated and selected with respect to the strategic areas within this and adjacent NIS Areas; first on the basis of current logistical capabilities and second on the basis of potentialities for logistical development. Routes lacking existing transportation facilities capable of carrying military traffic will be evaluated similarly in relation to routes having such facilities. All selected routes will be delimited and classified on the strategic areas map which will be supported by concise tabular or textual evaluation.

Section 21. Military Geographic Regions

This Section will be prepared by Army and will include material provided by Air Force and Navy. It will be an analysis of the NIS Geographic Area in terms of military geographic regions. The military geographic region as discussed in the NIS is a region in which the combination of environmental conditions is sufficiently uniform to permit, or to require, throughout its extent the use of the same general mode of military operations or kinds of warfare and of the same general types of equipment and personnel. Minor areas in which conditions significantly affect but do not prevent the basic mode of military operations may be considered either as military geographic subregions or as distinctive areas within the military geographic region, e.g., a hill belt in a large plain.

The military geographic regions and subregions for each NIS Geographic Area will be delimited on a map by the Army agency responsible for production of SECTION 21 after topics treated in SECTIONS 22 through 25 have been analyzed sufficiently to permit fixing of boundaries. All CHAPTER II contributors concerned will concur on regional and subregional boundaries previous to any agency's initiating final production of SECTION 21 material.

A. General

A military geographic regions map will show boundaries of the various regions, subregions, and/or distinctive areas. Regional breakdown will also be presented as a list in the text or as a concise tabular summary. Introductory integrated text will summarize significant aspects of each region as is necessary to relate the regions to the NIS Geographic Area as a whole and to analagous or comparable areas in North America. Photographs and other graphics may be used for illustration.

B. Regional analysis: Regions A, B, etc.

A concise textual analysis and a tabular summary of each region and its various subregions and/or distinctive areas will be given. Each region will appear as a separate numbered heading. Intelligence-type maps showing interrelated factors will be presented for each region, group of regions, or important part of a region.

The tabular summary of each military geographic region or subregion, supporting the map presentation of the region or subregion, will include the topics shown in the sample layout.

(Example)

FIGURE 21-1 . ANALYSIS OF SINGLE MILITARY
Tabular

REGION, SUBREGION, AND/OR DISTINCTIVE AREA	ENVIRONMENTAL						
	Landforms, relief, and drainage patterns	Drainage character- istics	Weather and climate	Water resources	Soils	Lithology	Vegetation

(Example)

GEOGRAPHIC REGION OR GROUP OF REGIONS

Analysis

FACTORS				MILITARY EVALUATION					MILITARY OPERATIONS (KNOWN TYPES)
State of ground	Culture features and towns	Coasts and landing beaches	Special physical phenomena	Cross- country movement	Constructional aspects			Other military aspects	
					Airfields	Roads	Underground installations		

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FIGURE 21-1. ANALYSIS OF SINGLE MILITARY GEOGRAPHIC REGION OR GROUPS OF REGIONS (Continued)

INSTRUCTIONS

1) All data in this summary will be presented in telegraphic form. The above format will be used, to be reproduced on a double-page spread, map apron, or fold-in.

2) Arrange regions in Column I in alphabetical sequence (i.e., Region A, Region B, etc.) and identify each by name. Data included directly under each topic by regions will concern those attributes which are characteristic of the region as a whole.

3) Arrange subregions and/or distinctive areas in Column I in alphabetical and numerical sequence under the appropriate region (i.e., Subregion A-1, Subregion A-2, etc.).

4) Treat content of all Environmental Factors and Military Evaluation columns in definitive terms. Use salient statistics and facts to categorize the regional, subregional, or distinctive area characteristics when pertinent. A high degree of discrimination must be exercised

in the selection of data to be included in the tabular summary for each topic. Include only those essential elements treated in other sections. If a particular topic is not applicable for any region, subregion, or distinctive area, the words "not applicable" will be included in the relevant space in the summary.

5) Under the heading of Military Operations include factual statements on *known types* of military operations such as airborne, amphibious, arctic, armored, cavalry, desert, infantry, jungle, and mountain, conducted in the region, or identify the region with a geographically analogous area for which types of modern operations are known. Statements should particularly bear on the extent to which specialized forces were employed in operations and whether such employment was required by environmental factors. If the success or lack of success of either conventional or specialized types of operations in the region can be definitely attributed to environmental factors, this should be noted.

Section 22. Coasts and Landing Beaches

A. General

1. SUMMARY

General description of the entire coastal area of study, including relations to major geographic regions and to adjacent NIS Geographic Areas. State length of coast in statute miles and refer to footnote on use of nautical and statute miles.* Stress best and poorest sectors and subsectors; mention specific beaches or coastal reaches that offer access to important routes inland. Follow by tabular description of major coastal divisions, as in example below.

* In text, distances are in statute miles unless nautical miles is specifically indicated by n., as "14 n. miles."

2. MAPS AND CHARTS

Refer to maps, charts, and sailing directions used and discuss any discrepancies involving coastal outline or distances.

3. CRITERIA FOR BEACH SELECTION

Discuss methods used for selecting beaches and sources from which selection was made.

4. BEACH TABLES

Discuss wherever necessary headings and terms used in tables, and types of information to be included therein.

a. BEACH NUMBERING AND LOCATION—How numbered in text, on beach location maps, on photos; how located; reference to photos.

(Example)

FIGURE 22-1. SUMMARY OF COASTS AND LANDING BEACHES

SECTOR	SEA APPROACH	BEACHES	COASTAL TERRAIN
(Locate by prominent features or towns. Include coordinates in parentheses.)	(Characteristics and dangers in both offshore and nearshore zones, including ice. Locate 5- and 10-fathom curves.)	(Number and general dimensions, gradients, and consistency of beaches, described in relative terms explained under A, 4.)	(Characteristics inland 15-20 miles or to first major barrier. Indicate presence of R.R.'s, roads, and trails.)
1 Plum Point to Wilson Cove (33°10'N, 10°34'E; 35°06'N, 12°48'E)	Offshore approaches generally clear; 10-fathom curve 4 to 6 mi. offshore; 5-fathom depths within 2 mi. of shore. Nearshore approaches generally clear with scattered rocks fringing shore; bottom slope <i>gentle</i> to <i>mild</i> ; bottom sand and clay.	Four areas of <i>short, narrow, firm</i> sand beaches with <i>moderate</i> to <i>steep</i> gradients. Good exits inland from all beaches.	Dunes back beaches, in turn backed by narrow coastal plain rising to rolling hills and mountains about 8 mi. inland. Paved highway parallels coast at 500 to 1,000 yds; several roads and trails lead inland; R.R. to Plum Point.
2 Wilson Cove to etc.			

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b. **LENGTH AND USABLE LENGTH** — Definitions of *long* and *short*; total length minus unusable stretches.

c. **WIDTHS: AT L.W.; AT H.W.** — Definitions of L. W. and H.W. limits; reference to beach profile diagram; *wide, medium, narrow*.

d. **GRADIENTS: L.W. TO H.W.; H.W. ZONE** — Definitions of gradients to supplement beach profile diagram; *steep to flat*.

e. **APPROACH** — Limits; bottom slopes; reference to beach profile diagram and beach gradient scale.

f. **SURF AND TIDAL RANGE** — Surf scale.

g. **MATERIAL AND FIRMNESS** — Definitions of *firm* and *soft*.

h. **TERRAIN IMMEDIATELY BEHIND BEACH** — 15 to 20 miles inland, or to first major barrier.

i. **EXITS AND COMMUNICATIONS INLAND** — Include routes parallel to shore.

5. RELIABILITY INDEX

6. GLOSSARY

List of common terms relating to terrain, hydrography, and political subdivisions.

B. Nearshore oceanography

1. GENERAL

Include note: For offshore oceanography and marine climate see Special NIS of appropriate area.

2. TIDES AND CURRENTS

Include table of tidal range constants, chart of cotidal lines, chart of spring tides, illustration of typical tidal curve for area, definitions of tidal terms, and text material on how to apply the tidal data. Text material on local currents.

3. SEA, SWELL, AND SURF

Include histograms and/or sea-and-swell roses for the coast area, depending on data available, text description and definitions of terms.

4. COASTAL BOTTOM SEDIMENTS

Include a table or a strip chart of the coastal bottom sediments, also brief text material.

5. BIOLOGY

Include descriptions and illustrations of dangerous marine life, such as poisonous sea snakes, and fish. Presence or absence of bioluminescence will be mentioned. Presence of algae that can conceal water hazards or foul screws and rudders of landing craft will be noted. All this material will be in text form with the exception of illustrations of dangerous marine life—if present.

C. Sector 1

(Coordinates of limits of sector)

(Reference to Coastal Divisions and Distribution of Landing Beaches Map (FIGURE 22-) or to beach location map if map shows entire sector; reference to general chart or charts issued by U.S.H.O.)

Sectors, preferably not exceeding 9 in number, should be based on clear divisions between different types of coastal terrain, which should agree with geographic regions presented in SECTION 21. Sector limits should be described in terms of distances from prominent geographic features such as major headlands.

General statement without heading. Brief summary of hydrography, coast, terrain backing coast, and number, character, and approximate location of beach areas. If sector is too varied to be summarized without dividing into subsectors, general statement may be confined to features common to whole sector, list of subsectors within sector, and number and approximate location of major beaches.

(Example)

FIGURE 22-2. BEACH AREAS OF
Beaches physically most suitable for

Reliability: FAIR

BEACH NUMBER AND LOCATION	LENGTH AND USABLE LENGTH	WIDTHS: AT L.W.; AT H.W.	GRADIENTS: L.W. TO H.W.; H.W. ZONE	APPROACH
(52) ★ Black Point E. (FIG. 22-66.) *	Cove beach, 1.9 mi. long; 1.0 mi. along moraine, forming a point; 1,500 yds. in cove SE of point intersected by two streams; all usable.	50 ft. at point to 600 ft. at stream mouths, L.W.; 25 ft. at point to 200 ft. at stream mouths, H.W.	1 on 5 at point, 1 on 50 at stream mouths, L.W. to H.W.; 1 on 5 at point, 1 on 10 at stream mouths, H.W. zone.	Nearshore bottom slopes <i>flat to steep</i> ; 30-ft. depth 750 to 900 ft. offshore; anchorage in 54 ft. 2,100 ft. off cove beach; good holding ground, mud and shell, approaches clear; offshore current sets N, 2 knots.

NOTE Beach lengths and distances along the coast and inland are expressed in statute miles; distances across water are expressed in nautical miles except when referring to beach locations.

* If beach is also described in text, add here "(See also (2) below.)"

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1. SUBSECTOR 1-A—SINGLE ISLAND, GROUP OF ISLANDS, OR STRETCH OF COAST

(Coordinates of limits of subsector.)

(Figure numbers of beach location maps of subsector; U.S.H.O. Charts of subsector.)

Subsectors should be selected as logical coastal units in which hydrographic or terrain conditions, or both, are sufficiently uniform to permit generalization. Limiting of subsectors to lengths convenient for the making of beach location maps leads to unnecessary repetition in the description of the areas covered by such maps.

General statement without heading. Brief description of general characteristics of subsector; very brief if covered in generalization under sector heading.

a. COAST — Progressing along coast, give for each part *brief* statement of offshore approach and shore features, followed by description of coastal terrain and brief description of anchorages. Give reference to applicable U.S.H.O. Chart if several charts cover area of subsector. Leave description of beaches to heading (b). *Avoid duplicating information that is clearly and correctly conveyed by the beach location maps* (distances, shapes, and dimensions of bays and islands, spot heights, etc.), except where such duplication is essential to clear statement. Coastal description of subsector may be broken into subdivisions (1), (2), (3), etc., as plotted on beach location maps. Subdivisions should be logical coastal units such as a stretch of fairly uniform coast, an island or group of islands, a bay or group of similar bays, a prominent peninsula.

b. LANDING BEACHES — Exclude general coastal description. Beach areas are each identified by reference number in parentheses keyed to encircled reference number on beach location maps. Coordination of coastal description and beach description should be maintained in the planning, writing, and drafting stages so that beaches or beach areas do not cross sector or subsector bound-

aries, and, if possible, do not cross subdivision boundaries. (General statement without heading can be given if desired.)

Example 1
(No beaches.)

b. LANDING BEACHES — "None described."

Example 2
(Beach table but no detailed text description.)

b. LANDING BEACHES — (General statement)
(Beach table: see example below.)

Example 3
(Beach table and detailed text description.)

b. LANDING BEACHES

(1) (*General statement*) — (Beach table: see example below.)

(2) *Single beach area* — If description is brief it may be run without subheadings. If description is longer, headings (a), (b), and (c) may be used as follows.

(a) LOCATION AND CHARACTER — Give location of beach, not coastal segment, proximity to landmarks and developed areas; shape, length, usable length, width, and gradient; physical composition, consistency, and bearing capability at L.W. and H.W.; tidal flats and salt marsh, including consistency of bottom; surface features and obstructions; structures such as groins and bulkheads; locations of rivers and streams entering or crossing beach; local use; areas most suitable for landings.

(b) SEA APPROACH — Deal briefly with area shoreward of 40-fathom depth or of 10 miles from shore, whichever is smaller; anchorage areas; describe in greater detail area shoreward of 5-fathom line; bottom gradient and character of bottom; locations and depths of reefs, bars, rocks, shoals, and other dangers; local conditions of winds, tides, currents, surf, waves, and water temperature ranges.

(*Example*)

COASTAL SUBSECTOR 1-A)
landing are marked with star (★)

(Map: FIGURE 22-4)

SURF AND TIDAL RANGE	MATERIAL AND FIRMNESS	TERRAIN IMMEDIATELY BEHIND BEACH	EXITS AND COMMUNICATIONS INLAND
Surf <i>rough to moderate</i> ; shore drift E to W, 1 knot; tidal range 11.5 ft., springs.	Gravel and sand; <i>firm</i> .	Point backed by steep hills; cove beach backed by wide valley rising to hills 5 mi. inland.	Trail leads from cove beach to main coastal road and settlements inland. Coastal R.R. parallel to road. Telephone and telegraph at settlements.

(c) ADJACENT TERRAIN AND EXITS — Topography on flanks of beach, immediately backing beach, and inland at least 15 to 20 miles or to first major barrier; nearest cover and concealment; trafficability; roads, trails, waterways, natural corridors, and cross-country exits from beach, nearest fresh water—potable and non-potable; nearest drop zones and emergency landing places for aircraft; nearest radio, telegraph, telephone, railroads, power lines, power plants, and habitations.

(3), (4), etc., *Single beach area* — Group of closely related beaches.

2. SUBSECTOR 1-B

Stretch of coast, single island, or group of islands.

3. SUBSECTOR 1-C; etc.

D. Sector 2

E. Sector 3; etc.

NOTE If landing places other than beaches are described, or if descriptions of beach areas and other landing places are interspersed, use general heading, b. Landing places.

X. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 23. Weather and Climate

A. General weather and climatic conditions

This Subsection emphasizes the processes which control climatic regimes and contains the bulk of general climatic discussion. Include figures, photos, maps, and those tables which are necessary to illustrate especially significant climatic factors. Illustrate destructive effects of weather and weather phenomena such as dust storms, tornadoes, fog banks, etc. Discuss the general weather and climate conditions in their broad aspects emphasizing those elements and factors having significance in regard to high-level military operational planning as specified by the various agencies of the Department of Defense. Subdivision of the NIS Geographic Area into militarily significant climatic regions is desirable depending upon the weather and climatic conditions in the particular NIS Geographic Area.

B. Weather and military operations (text, illustrations, and significant tables)

1. AIR OPERATIONS (above friction layer)

Discuss climatic factors and conditions which affect all types of aerial operations, e.g., cloudiness, visibility, icing, turbulence, thunderstorms, winds and temperatures aloft, dust and blowing sand in the upper air, and special upper-air weather phenomena.

Tables to contain data significant to aerial operation.

2. AIR-GROUND OPERATIONS (within friction layer)

Discuss climatic factors which affect chemical and biological warfare, control of atmospheric contamination, parachute, aircraft landing, glider, and similar operations which take place within the lower layers of the atmosphere. These conclusions result from analyses of vertical temperature, moisture, density, and wind structure as influenced by topography and large-scale meteorological conditions and their translation into microclimatic terms; i.e., distributions (local) of wind, temperature, humidity, stability, fog, haze, etc., as functions of location and topography. Give full consideration to the periodic (diurnal and seasonal) and non-periodic variations in stability, visibility, temperature, humidity, etc.

3. GROUND SURFACE OPERATIONS

Discuss briefly movement of equipment, mobility, clothing, construction, storage, shelter, etc., in terms of precipitation, temperature, floods, dry and wet periods, etc., using illustrative tables when necessary to emphasize important elements. Make reference to SECTION 24 for the effect of climate on state of ground and cross-country movement.

JUNE 1951

M I L I T A R Y G E O G R A P H Y

4. AMPHIBIOUS OPERATIONS

Discuss effects of coastal weather including surface winds and their relation to swell and surf, cloudiness, visibility, air and sea-water temperatures, and drift ice.

C. Comments on the meteorological services

Discuss the meteorological facilities in the area, the observational network, types of observation, equipment, and personnel.

D. Climatic tables

Tables to contain average and extreme climatic data significant to all types of military operations within the area.

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 24. Topography

This Section is prepared by Army. It is designed to be topical treatment for the NIS Geographic Area as a whole of those environmental factors not treated in SECTIONS 22, 23, and 25 of CHAPTER II and it is intended that maps and tables be used to the practicable maximum in presenting the information. Photographs will be used for illustrative purposes within the topical scope of the Section. A reliability diagram will accompany each topical map included in the Section.

A. General

Appraise briefly the relative significance of the elements which comprise the topography of the NIS Geographic Area under discussion.

B. Descriptive analysis

Each of the subordinate topics will treat in factual terms descriptively and definitively those aspects of the topic which are known to have military significance. Statements on military interpretations or applications will be confined to Subsection 24, C. Subsection 24, B, will include only such evaluations as are prescribed in the following paragraphs. The discussion of each topic as a whole will be in proportion to its relative significance in the NIS Geographic Area with respect to other topics treated in the Section. Seasonal aspects will be considered wherever significant. Tabular presentation will be used to a practicable maximum. A map will be prepared for each topic where appropriate.

1. LANDFORMS, RELIEF, AND DRAINAGE PATTERN

Cover with an integrated discussion developed around maps, supported by text and tables, which

treat definitively the essential elements of the topic with emphasis on the larger aspects of the patterns involved.

2. DRAINAGE CHARACTERISTICS

Include the essential following (or other pertinent) data in their seasonal aspects for significant streams, lakes, and other water features: depths, widths, banks, bottom conditions, velocities, gradients, transparency or turbidity, sedimentation, temperatures, and ice conditions. The treatment will be in tabular and graphic form supported by essential text.

3. WATER RESOURCES

Definitive information on quantities, qualities, availability, accessibility, and distribution of surface- and ground-water supplies will be presented in map(s), table(s), and text. Data on qualities and quantities will be selected in relation to all probable military uses of water and not only with respect to potability.

4. SOILS

The treatment of soils will be developed around a simplified soils map showing dominant soil units and supported by a table and text describing their physical characteristics and evaluating their engineering properties.

5. LITHOLOGY

This topic will be developed around a simplified geologic map showing significant lithologic units and supported by a table and text describing their physical characteristics and evaluating their potential usefulness as construction materials.

PAGE II-9

6. VEGETATION

Existing significant vegetation types will be delimited on a map supported by table(s) and text describing physical characteristics such as heights, density of stand, stem diameters, coloration, cultivation practices, etc., and evaluating their potential usefulness as construction materials and as sources of supplies, and their susceptibility to conflagration.

7. STATE OF THE GROUND

This topic will be prepared by Army after Section 23 and Subsections 24, B, 1, 2, 4, 5, and 6 have been completed. It will be developed around maps supported by tables and text and will be a synthesis showing the seasonal occurrence and characteristics of the ground when dry, wet, frozen hard, and snow covered.

8. CULTURE FEATURES

Cover with an integrated discussion of the location and distribution of cultural objects which exist in sufficient concentrations to possess significance in planning of major military operations. Such features as mines, quarries, tombs, burial mounds, dikes, ditches, transportation nets, hedge rows, terraces, etc., will be evaluated and presented in map(s), table(s), and photographs supporting the text.

9. SPECIAL PHYSICAL PHENOMENA

Such factors as permafrost, seismic disturbances, and volcanic phenomena peculiarly applicable to the NIS Geographic Area being considered and of outstanding significance will be presented in map and table form supported by an integrated textual discussion. This discussion will give definitive information on the phenomena within the area concerned; it will not be concerned with general or theoretical aspects of the subject.

C. Military evaluation**1. CROSS-COUNTRY MOVEMENT**

Evaluate all environmental conditions affecting off-road movement of military vehicles, equipment, and personnel throughout the year.

2. CONSTRUCTIONAL ASPECTS

Evaluate the feasibility of constructing airfields, roads, shelters, and underground installations during the various seasons as affected by the collective environmental factors. Where the natural conditions of the NIS Geographic Area warrant, roads may be combined in a single topic with airfields. Otherwise each topic will be presented separately in accordance with the outline. Specific military constructional problems other than those applicable to airfields, roads, and underground installations will be treated under such additional subordinate headings as are required.

3. OTHER MILITARY ASPECTS

Evaluate such other military aspects as are not subject to discussion under Cross-country Movement or Constructional Aspects but that are affected by environmental topics treated in Section 24.

D. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 25. Urban Areas

This Section is designed to be a digest of information on the physical aspects of the urban areas in the NIS Area supplemented by pertinent generalized comments concerning their geographic, political, economic, and military importance. Where the general composition of the cities and towns in the area lends itself to comparison with the cities and towns in a geographic area of the United States or with those of countries in the same geographic, political, or economic group, such comparison is desirable. Data will be presented for the NIS Area as a whole, except

when such treatment might be misleading for an included subarea. When the area under consideration is divided into distinctive geographic, political, or economic subareas, the data may be presented by appropriate subarea.

Tables and charts will be utilized to a maximum to supplement descriptive text. Town plans will emphasize those natural and man-made features of the urban area and its environs that are of primary military significance. They will supplement the text and tabulated data. Each key strategic urban area will be illustrated by suitable

JUNE 1951

MILITARY GEOGRAPHY

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plans, either as functional overlays on an aerial mosaic, or if no suitable mosaic is available, on a town plan that emphasizes adequately the salient urban characteristics having military significance. Photographs will be used to support the text and other graphics.

Where there are important deficiencies in the source data available for the study, cover these deficiencies in the Comments on Principal Sources.

A. General

Summarize the significant features affecting urban areas collectively including a brief generalized treatment of the major collective functions (industrial, agricultural, mining, etc.).

1. URBANIZATION

a. **PATTERN** — Ratio of urban population to total populations; distribution of urban areas; effects of ethnic and religious groupings where pertinent.

b. **FACTORS AFFECTING URBANIZATION, AND TRENDS** — With respect to economic development (agricultural, industrial, exploitation of natural resources).

NOTE Generalized statements with regard to population trends will be coordinated with the contributor for CHAPTER IV (SECTION 41).

2. MAIN CHARACTERISTICS OF URBAN AREAS

Discuss typical militarily significant characteristics of cities and towns by area or subareas, covering:

a. **PHYSICAL CHARACTERISTICS** — Significant characteristics of town construction as influenced by tradition, terrain, climate, etc.; of materials used and their availability; of capacity to resist shock, inundation, conflagration, etc.

b. **COMMUNICATIONS** — Generalized statements on principal types of intertown communications (rail, road, waterway, and air); their adequacy and effect on the cities and towns of an area.

c. **UTILITIES, SERVICES, AND FACILITIES** — Evaluate the cities and towns of an area collectively with respect to the extent of development generally (including lack, prevalence, and adequacy) of those elements of urban economy commonly classified as utilities, services or facilities; such as water supply, sewerage, sanitation (including public health conditions), electric power, transit, telecommunications, storage, hospitals, gas, refrigeration, etc.

d. **PLANNING** — Programs for reconstruction in war-devastated or other devastated areas; future planning and expansion programs.

NOTE Emphasis will be given to the items discussed in 25, A, 2, a.

B. Principal urban areas

Principal urban areas include key strategic urban areas and other selected urban areas (never more than 100) chosen for consideration because of their size and their military, political, and economic importance. These two categories of urban areas will be discussed in separate subsections as indicated below. (Army will submit lists of key strategic urban areas and other selected urban areas through the CHAPTER II Coordinator to the NIS Committee for transmission to IAC agencies for concurrence and/or comment. In the event of nonconcurrence(s) only or comment, CHAPTER II Coordinator will arrange a conference of IAC agencies concerned to resolve differences and to obtain a generally acceptable selection.)

Introductory text should explain the method of treatment of principal urban areas and highlight the most important of these areas and their military significance in the country's political and economic structure.

1. KEY STRATEGIC URBAN AREAS

Key strategic urban areas are those considered to be of primary military, political, or economic significance.

Introductory statement of the number of key strategic urban areas and their importance generally (reasons for selecting).

The following indicates the preferred order of discussion in the detail required for individual key strategic urban areas.

a. **URBAN AREA A** — Name to be in the spelling approved by the Board on Geographical Names, followed by variant names and spellings, in parentheses, the coordinates, then the figure number of the town plan in parentheses.

NOTE Normally, only one paragraph will be required for each of the subheadings, (1) to (5), following. If the importance justifies, appropriate subparagraphs may be used for expanded treatment. Appropriate references should be made to the accompanying illustrative material.

(1) **Significance** — Brief statements outlining the significant facts about the urban area, covering: its location (political and geographic); its population (as of a stated date) and trend (only if significant); its importance based upon its political, cultural, military, and economic functions.

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PAGE II-11

(2) *Physical characteristics* — Generalized statements covering: topography of the site (including underlying earth structure) and natural landmarks; general layout of urban area, shape, and dimensions (illustrated by an annotated aerial photograph, by town plans with suitable overlays showing functional and structural patterns and features, and by photographs, if available); ratio of roof coverage to ground area; street pattern (passability for military traffic, width of streets, and clearances), crossings of natural obstacles, and by-passing of town; predominating types of construction and man-made landmarks, and heights of buildings (by stories); other pertinent characteristics.

(3) *External communications* — Factual statement of existing rail, road, water and air communications (including the location of airfields serving the urban area); the adequacy of such communications and their importance to the town. Details of road widths, trackage, length of runways, etc., are not required.

(4) *Utilities, services, and facilities* — General statements covering: water supply; sewerage system; sanitation (including public health conditions); electric power; transit (streetcar, trolley bus, bus, and cab); telecommunications; billeting capacity (public buildings, schools, institutions, barracks, etc.); storage (open, closed, cold, petroleum, explosives); hospitals (total bed capacity); and any other utilities, services, or facilities.

NOTE Specific items must be correlated and coordinated with the producers of counterparts in other chapters or sections.

(5) *Important industrial and other installations*

Whenever possible the relative national or international industrial or other importance generally

of the urban area will be indicated. Similarly, the national or international importance of specific installations in relation to their respective industries will be indicated.

b. URBAN AREA B

c. URBAN AREA C, etc.

2. OTHER SELECTED URBAN AREAS

Present information on other selected urban areas in tabular form. The text will provide an introduction giving the number and general importance of these areas. In the tabular presentation, towns may be grouped by subareas, if this is desirable. Appropriate column headings will be used for the following information:

Name, followed by variant names and spellings in parentheses.
Coordinates
Population
Importance—a brief statement of the dominant facts on which selection is based.
Remarks—other appropriate comment.

C. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

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Chapter III - Transportation and Telecommunications

OUTLINE

SECTION 30. INTRODUCTION

SECTION 31. RAILWAY

- A. General
- B. Characteristics of the railway network
 - 1. General characteristics
 - 2. Line and terminal facilities
 - 3. Construction and maintenance
 - 4. Traffic interruption factors
- C. Control and organization
 - 1. Control
 - 2. Organization
 - 3. Personnel
- D. Operations
 - 1. Operating factors
 - 2. Traffic
 - 3. Financial data
- E. Equipment
 - 1. General characteristics
 - 2. Motive power
 - 3. Rolling stock
 - 4. Special equipment
- F. Principal railways
- G. Comments on principal sources

SECTION 32. HIGHWAY

- A. General
- B. Characteristics of the highway network
 - 1. General characteristics
 - 2. Highway facilities
 - 3. Construction and maintenance
 - 4. Traffic interruption factors
- C. Control and organization
 - 1. Control
 - 2. Organization
 - 3. Personnel

- D. Operations
 - 1. Operating factors
 - 2. Traffic
 - 3. Financial data
- E. Equipment
 - 1. General
 - 2. Motor vehicles
 - 3. Special equipment
- F. Principal highways
- G. Comments on principal sources

SECTION 33. INLAND WATERWAY

- A. General
- B. Characteristics of the inland waterway system
 - 1. General characteristics
 - 2. Waterway facilities
 - 3. Construction and maintenance
 - 4. Traffic interruption factors
- C. Control and organization
 - 1. Control
 - 2. Organization
 - 3. Personnel
- D. Operations
 - 1. Operating factors
 - 2. Traffic
 - 3. Financial data
- E. Equipment
 - 1. General characteristics
 - 2. Craft census
 - 3. Special equipment
- F. Principal inland waterways
- G. Comments on principal sources

~~CONFIDENTIAL~~

PAGE III-1

SECTION 34. PETROLEUM PIPE LINE

(Treated in Subsection 62, C and Supplement V)

SECTION 35. PORTS AND NAVAL FACILITIES

- A. General
 - 1. Ports
 - 2. Naval facilities
- B. Summary of ports
- C. Summary of naval facilities
- D. Comments on principal sources

SECTION 36. MERCHANT MARINE

- A. General
- B. Organization
 - 1. Ownership
 - 2. Administration
 - 3. National policy
 - 4. Foreign interests
 - 5. Personnel and training
- C. Composition
- D. Shipping Program
 - 1. Construction program
 - 2. Purchase or sale of vessels
 - 3. Chartering of vessels
- E. Normal shipping routes and ports of call
- F. Operations and traffic
- G. Comments on principal sources

SECTION 37. CIVIL AIR

- A. General
 - 1. Domestic status
 - 2. International aspects
 - 3. Other general topics
- B. Government control and policy
 - 1. Administration
 - 2. Support
- C. International relations
 - 1. Affiliations
 - 2. Air agreements
 - 3. Foreign influence

- D. Civil air enterprises
 - 1. Scheduled air carriers
 - 2. Miscellaneous air carriers
 - 3. Government and private operators

- E. Civil aviation training
 - 1. Preparatory
 - 2. Air crew and ground personnel

- F. Services and supplies
 - 1. Maintenance installations
 - 2. Aircraft and spare parts
 - 3. Petroleum products

- G. Civil air facilities
 - 1. Airfields
 - 2. Operational aids

- H. Military potential
 - 1. Aircraft availability
 - 2. Personnel readiness
 - 3. Mobilization plans

- I. Means of identification

- J. Personalities

- K. Comments on principal sources

SECTION 38. TELECOMMUNICATIONS

- A. General
 - 1. Background and significance
 - 2. Administration and control
 - 3. Source of equipment
 - 4. Major aspects of privacy systems
- B. Military appreciation and vulnerability
 - 1. Military use of telecommunications systems
 - 2. Vulnerability
- C. Domestic facilities
 - 1. General
 - 2. Telephone
 - 3. Telegraph
 - 4. Radio
- D. International facilities
 - 1. General
 - 2. Submarine cables
 - 3. Landlines
 - 4. Radio
- E. Comments on principal sources

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER III

TRANSPORTATION AND TELECOMMUNICATIONS

Section 30 Introduction
Section 31 Railway
Section 32 Highway
Section 33 Inland Waterway
Section 34 Petroleum Pipe Line
Section 35 Ports and Naval Facilities
Section 36 Merchant Marine
Section 37 Civil Air
Section 38 Telecommunications

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OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Section 30. Introduction

This Section will be an over-all appreciation of the Transportation and Telecommunication systems of the country or area under study.

It will treat those general aspects which are necessary to the proper concept of the subject as a whole and which cannot be treated adequately elsewhere. It will be prepared upon completion of

the remaining sections of this Chapter so as to be able to present in a single section an integrated account of all phases of transportation and telecommunications.

Material should be presented in graphic form whenever practicable.

Section 31. Railway

A. General

An appreciation of railway transportation in the country concerned, position in the economic structure, relationship to other means of transportation, and its adequacy for peacetime requirements. A short account of significant historical items, including war damage and restoration. Where pertinent, comparisons should be made with U.S. railways, as a means of orientation for the reader.

B. Characteristics of the railway network

1. GENERAL CHARACTERISTICS

Discuss the salient features of the country's rail network and its component systems, covering those characteristics which apply on a nation-wide basis such as:

Extent (total mileage according to gage and number of tracks).
Pattern and geographic distribution.
Density and nature of traffic.
Connections and interchange with adjacent countries.
Status of development and general condition of the railroads.

2. LINE AND TERMINAL FACILITIES

Discuss the general characteristics of the network facilities including the following topics (using photographs of representative type items):

Permanent way
Roadway structure — Bridges, tunnels, etc. (in table form: location, description and structural data for selected structures)
Ferries
Fuel and water
Signal and communication
Electrification
Yards and terminals (including shops and repair facilities)
Loading and clearance (attach diagrams)

3. CONSTRUCTION AND MAINTENANCE

Construction and maintenance problems, policies and procedures.

4. TRAFFIC INTERRUPTION FACTORS

Analyze the most critical points or features of the railway network emphasizing existing or potential factors, which might adversely affect traffic in time of emergency.

C. Control and organization

1. CONTROL

Ownership and extent of governmental control and regulations.

2. ORGANIZATION

Organization and administrative structure.

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PAGE III-3

3. PERSONNEL

Number of employees by departments and general level of training and efficiency.

D. Operations**1. OPERATING FACTORS**

Discuss operational methods, regulations and practices for freight and passenger traffic with an appraisal of the general level of efficiency, using U.S. standards and methods where possible as a basis of comparison.

2. TRAFFIC

Discuss normal traffic conditions, giving statistics for the following items, using current year and representative annual figures to indicate trends:

- Freight ton-miles
- Total freight hauled (by commodities)
- Freight car loadings
- Turn-around time (average per freight car)
- Average net tons per train
- Passenger miles

3. FINANCIAL DATA

Operating revenues, expenses, and ratios (including governmental financial aspects).

E. Equipment**1. GENERAL CHARACTERISTICS**

A general statement as to adequacy of equipment; present condition; interchangeability of equipment with neighboring countries; self-sufficiency in production of equipment; amounts and types imported or exported. General characteristics and standards of equipment including: gage; type of brakes; type and height of couplings; etc.

2. MOTIVE POWER

Predominant type or types (steam, diesel, electric), number in service (by gages), and general condition of locomotives with tabulation of the following information for freight, passenger and yard engines:

- Total number by gage
- Type (wheel arrangement)
- Rated tractive effort
- Axle load
- Percent serviceable

3. ROLLING STOCK

Predominant type or types, and general condition of freight and passenger equipment, with tabulation of the following information:

FREIGHT CARS:

- Number
- Type (box, gondola, flat, etc.)
- Percent serviceable
- Inside dimensions
 - Length
 - Width
 - Height
- Rated capacity (in tons)

PASSENGER CARS:

- Number
- Type
- Rated capacity (number of passengers)

4. SPECIAL EQUIPMENT

- Rail cars (number and types)
- Armored equipment
- Work equipment (including locomotive cranes)
- Snow plows

F. Principal railways

A selection and analysis of the lines of prime importance to the country's economic and military requirements, giving significance of each line (attach map and indicate lines by number). The selection of lines should be made on the basis of major trunk routes, important alternate routes, key connecting lines, and those of strategic significance. Special attention should be given to international connections. Where feasible, text descriptions of selected individual lines are to be accompanied by profiles and small-scale route maps or schematic route diagrams.

Individual line description (for each selected line) including:

- Name of line with map identification number
- Gage
- Terminal points and principal connections
- Route mileage, total and by number of running tracks
- Characteristics of rail, ties, ballast
- Minimum radius of curves
- Ruling grade
- Line capacity
- Critical points
- Bridges
 - Number
 - Average and total length
 - Significant structures
- Tunnels
 - Number
 - Average and total length
 - Significant structures
- Ferries
 - Number
 - Location
 - Capacity
- Electrification

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G. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility

to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 32. Highway

A. General

An appreciation of highway transportation in the country concerned, its position in the economic structure, relationship to other means of transportation, and its adequacy for peacetime requirements. A short account of significant historical items, including war damage and restoration. Where pertinent, comparisons should be made with U.S. highway transport as a means of orientation for the reader.

B. Characteristics of the highway network

1. GENERAL CHARACTERISTICS

Describe the salient features of the highway network covering those characteristics which apply on a nation-wide basis such as:

- Extent (road classification system with mileage summaries)
- Pattern and geographic distribution
- Density and nature of traffic
- Connections with adjacent countries
- Status of development and general condition of the highways
- Numbering and marking system (or, if no system, explanation of arbitrary system used in SECTION 32)

2. HIGHWAY FACILITIES

Discuss the general characteristics of highway facilities under the following heads (include photographs of representative type items):

a. ROAD — Surface, base, shoulders, drainage, etc. Present in table form technical data on selected sections of representative type roads.

b. STRUCTURES — Present in table form, location, description, and structural data for selected major structures. (Bridge data to be fully integrated with such data in SECTION 31.)

- Bridges
- Tunnels
- Ferries and fords
- Bottlenecks
- Vehicle repair and fueling facilities
- Design and specification standards
- Structure clearances
- Load limitations

3. CONSTRUCTION AND MAINTENANCE

Construction and maintenance problems, policies, and procedures.

4. TRAFFIC INTERRUPTION FACTORS

Analyze the most critical points or features of the highway network emphasizing existing or potential factors which might adversely affect traffic in time of emergency.

C. Control and organization

1. CONTROL

Ownership, governmental control and regulations affecting the highway transportation system and its principal carriers.

2. ORGANIZATION

Organization and administrative structure.

3. PERSONNEL

Highway department personnel—number, general level of training and efficiency.

D. Operations

1. OPERATING FACTORS

Operational regulations, methods, and practices for freight and passenger traffic with an appraisal of the general level of efficiency using U.S. standards and methods where possible as a basis of comparison.

2. TRAFFIC

Discuss normal traffic conditions, giving statistics under the following headings, using current year and representative annual figures to indicate trends:

- Passenger
- Freight (by commodities)
- Total (use flow charts)
- Average freight net tons per unit

~~CONFIDENTIAL~~

PAGE III-5

3. FINANCIAL DATA

Operating revenues, expenses and ratios (including governmental financial aspects).

E. Equipment**1. GENERAL**

A general statement as to adequacy of equipment; present conditions; self-sufficiency in production of equipment; amounts and types imported or exported. General characteristics, fuels used, and vehicle standards.

2. MOTOR VEHICLES

Show in tabular form:

Number
Types
 Passenger cars
 Trucks
 Busses
Capacities

3. SPECIAL EQUIPMENT

Show in tabular form:

Road repair and maintenance
 Stone crushers
 Rollers
 Graders, etc.
Trailers
Animal drawn vehicles (if used extensively)

F. Principal highways

1) Select and analyze the highway routes of prime importance to the country's economic and military requirements (attach map and indicate routes by numbers). The selection of routes should be made on the basis of major trunk roads, important alternate routes, key connecting routes, and those of strategic significance. Special

attention should be given international connections.

2) Individual route description

Discuss these selected routes, pointing out their particular importance and general characteristics, including:

Route number and/or name
Starting points, terminals and route mileage
Principal intersections and connections with adjacent national networks
Pavement data—Type, width, crown, shoulders, load limits, thickness and condition for base and surface
Traffic bottlenecks—Gradients over 7%, narrow bridges, tunnels, defiles, sharp curves, etc.
Bridges
 Number
 Average and total length
 Significant structures
Tunnels
 Number
 Average and total length
 Significant structures
Ferries
 Number
 Location
 Capacity
Fords

G. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 33. Inland Waterway

A. General

An appreciation of inland waterway transportation in the country concerned, its position in the economic structure, relationship to other means of transportation, and its adequacy for peacetime requirements. A short account of significant historical items, including war damage and restoration. Where pertinent, comparisons should be made with U.S. waterways as a means of orientation for the reader.

Treatment of inland waterway ports is to be coordinated in detail with SECTIONS 35 and 36 and with SUPPLEMENT I to assure appropriate coverage of all factors in water-borne transport.

B. Characteristics of the inland waterway system

1. GENERAL CHARACTERISTICS

Describe the salient features of the country's inland waterway network and its component parts, covering those characteristics which apply on a nation-wide basis such as:

- Extent (number and length of navigable waterways)
- Areal distribution
- Density and nature of traffic
- Connections with adjacent countries
- Status of development and general condition of the inland waterway network

2. WATERWAY FACILITIES

Discuss the general characteristics of facilities including the following topics (using photographs of representative type items):

- Limits of navigability (In terms of craft dimensions.)
- Ports (To be fully integrated with SECTION 35.)
- Structures and aids (Structures, dams, locks, bridges, navigational aids, etc.)
- Hydrography (Beds, depths, widths, currents, tides, etc.)
- Topography (Watersheds, flood plains, banks, etc.)
- Climate and weather conditions (Seasonal variations, floods, drouth and freezing.)
- Design and specification standards

3. CONSTRUCTION AND MAINTENANCE

Discuss construction and maintenance problems, policies, and procedures.

4. TRAFFIC INTERRUPTION FACTORS

Analyze the most critical points or features of the inland waterway network emphasizing existing or potential factors which might adversely affect traffic in time of emergency.

C. Control and organization

1. CONTROL

Ownership, governmental control and regulations affecting the inland waterway system and its principal carriers.

2. ORGANIZATION

Organization and administrative structure.

3. PERSONNEL

Inland Waterway Department personnel—number, general level of training and efficiency.

D. Operations

1. OPERATING FACTORS

Operational regulations, methods, and practices for freight and passenger traffic with an appraisal of the general level of efficiency using U.S. standards and methods where possible as a basis of comparison.

2. TRAFFIC

Discuss normal traffic conditions, giving statistics under following headings using current year and representative annual figures to indicate trends:

- Passenger
- Freight (by commodities)
- Total

3. FINANCIAL DATA

Operating revenues, expenses and ratios (including governmental financial aspects.)

E. Equipment

1. GENERAL CHARACTERISTICS

A general statement as to adequacy of equipment; present condition; self sufficiency in production; amounts and types imported or exported. General characteristics, fuel used, equipment standards.

2. CRAFT CENSUS

Show in tabular form:

- Number
- Types
 - Passenger
 - Freight

3. SPECIAL EQUIPMENT (repair and equipment)

Show in tabular form:

- Number
- Types

F. Principal inland waterways

1) Select and analyze the inland waterways of prime importance to the country's economic and military requirements (attach map). The selection of waterway routes should be made on the basis of major navigable waterways which are of strategic significance. Special attention should be given to international connections.

2) Individual waterways

Discuss these selected waterways, pointing out their particular importance and general characteristics, including:

Route number and name
 Starting points, terminals and route mileage
 Limits of navigability (in terms of craft dimensions)
 Ports
 Name
 Wharfage
 Total length
 Depths alongside
 Port capacity (annual tonnage)
 Storage
 Handling facilities (cranes)
 Structures and aids
 Locks
 Clearances (chamber dimensions)

Structural data

Operation

Bridges and other engineering structures

Location and clearance (horizontal and/or vertical) for limiting structure or structures.

Dams, navigational aids, etc.

Design and specification standards

Hydrography (beds, depths, width currents, tides, etc.)

Climate and weather conditions (seasonal variations, floods, drouth and freezing)

G. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

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Section 34. Petroleum Pipe Line

(Treated in Subsection 62, C and Supplement V)

Section 35. Ports and Naval Facilities**A. General****1. PORTS (to be fully integrated with SECTION 33)**

Comprehensive evaluative discussion covering:

Areal distribution and grouping of ports
 Characteristics of ports in regard to: Comparative size, layout, normal commercial capacity, use, methods of operation, adequacy, and relative significance in and functional relation to the transportation system and commercial economy of the area.
 Governmental control and administration (where relevant)

2. NAVAL FACILITIES

General analysis of naval facilities.

B. Summary of ports

1) Cross reference to NIS SUPPLEMENT I, Ports and Naval Facilities.

2) List principal and secondary ports.

3) Summary table of significant characteristics and facilities of principal and secondary ports using standard table with following heads:

NAME (coordinates)

HARBOR:

Type

Entrance (least depth and width)

Largest vessel accommodated (length and draft)

Tides (springs and neaps)

Ice conditions (periods closed)

ANCHORAGE:

Free-swinging berths (number and type)

Fixed moorings (number and type)

WHARVES:

Total linear feet (expressed in categories of depths alongside):

30 and over

25 to 29

19 to 24

13 to 18

6 to 12

Number of berths (class A, B, C, etc.; define by footnote)

MECHANICAL HANDLING FACILITIES

Cranes (number and category)

Specialized handling equipment (number and category)

Maximum single lift (tons)

COVERED STORAGE FACILITIES CAPACITY:

Transit sheds (sq ft)

Warehouses (sq ft)

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- Cold storage (cu ft)
- Bulk storage (cu ft)
- Petroleum tankage (bbl)
- CLEARANCE (out of the immediate port area)
 - Railroad lines (number, gage, and connections)
 - Roads (number and connections)
- ESTIMATED MILITARY PORT CAPACITY* (L/tons per 20-hour day)
- REPAIR FACILITIES:
 - Graving docks (number, capacity, by vessel size, of the largest)
 - Floating dry docks (number, and capacity in tons of the largest)
 - Marine railways (number, and capacity in tons of the largest)
 - Repair plant (summary of capabilities)
- NAVAL FACILITIES (indicate presence or absence of)
- 4) List minor ports (with coordinates)

* Assumptions and conditions used in determination of estimate to be carried as a footnote.

C. Summary of naval facilities

- 1) List naval bases (with coordinates)
- 2) Summary table of activities and facilities of each base.

D. Comments on principal sources

This Subsection is to serve the following purposes:

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Section 36. Merchant Marine

A. General

Give a brief summary of the Merchant Marine of the country including: number of ships involved, ownership, normal trade, place in the economy, general policy, and adaptability for military use.

B. Organization

1. OWNERSHIP (government or private)
2. ADMINISTRATION
3. NATIONAL POLICY

To include subsidies, regulation, and international relations of the Merchant Marine.

4. FOREIGN INTERESTS
5. PERSONNEL AND TRAINING

C. Composition

- 1) Number of ships by type (1000 gross tons and up)
 - 2) Name, speed, tonnage (GRT and DWT) size (length, breadth, depth, and draft), type of power, type of fuel used, daily fuel consumption, origin, year built, passenger accommodations, crew strength, and special equipment.
 - 3) Any special modifications or readily adaptable combat features, i.e., gun emplacements
 - 4) Detail
- To include an analysis of the fuel, speed, tonnage, and age groupings and any conclusions

drawn therefrom. A discussion of the availability of fuel and of the number and tonnage of the vessels from 500 to 1000 gross tons.

D. Shipping program

1. CONSTRUCTION PROGRAM

- a. FUNDS APPROPRIATED
- b. SCHEDULE BY TYPES AND NUMBER
- c. SHIPYARD LOCATIONS
- d. AVERAGE NUMBER OF SHIPYARD WORKERS
- e. CAPACITY OF SHIPBUILDING INDUSTRY
- f. KEELS LAID — To show details for approximately one year together with long time general trends.
- g. LAUNCHINGS (same explanation as f.)
- h. DELIVERIES (same explanation as f.)

2. PURCHASE OR SALE OF VESSELS

List number and countries from and to which vessels were sold and new and former names for last year.

3. CHARTERING OF VESSELS

List number and countries from and to which vessels were chartered for past year together with any significant trends, either long time or recent.

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PAGE III-9

E. Normal shipping routes and ports of call**F. Operations and traffic**

Discuss generally the place of the Merchant Marine in the economy of the nation including such items as invisible income, exchange earned, percentage of population dependent, and other related matters.

G. Comments on principal sources

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Section 37. Civil Air**A. General**

Over-all discussion of civil aviation within and related to the subject nation, summarizing detailed information of all topics, and generally in topical sequence, appearing in subsequent paragraphs and including:

1. DOMESTIC STATUS

Give a résumé of the development and present characteristics of the national civil aviation effort, with particular reference to its adequacy and effectiveness in serving the transportation needs of the nation and its capability for augmenting the military air strength. State the total number of aircraft and aviation personnel engaged in civil aviation, showing the aircraft by types, and the personnel by category of employment.

2. INTERNATIONAL ASPECTS

Outline briefly the position occupied by the nation in world air transportation activities, with emphasis on any important geographic relation to world air routes, and/or any significant international civil aviation affiliations.

3. OTHER GENERAL TOPICS

Other information which affects or applies to Civil Air but which is not appropriate to any of the main subsections.

B. Government control and policy**1. ADMINISTRATION**

a. LAWS AND REGULATIONS — Summarize the basic law or laws governing civil aviation and discuss briefly any significant provisions. Itemize any general regulations which may have been adopted (i.e., those pertaining to the registry of

aircraft, the issuance of airworthiness certificates, the licensing of aviation personnel, the certification of airline companies, or other general subjects). If air corridors have been prescribed for use by foreign and/or national air carriers, give a brief discussion and supplement the text with a map on which the corridors are depicted. Indicate any further special controls applicable to foreign aircraft operating inside the nation.

b. CONTROLLING AGENCY — Designate the government agency (ministry, department or bureau) charged with civil aviation and outline the functional organization of the agency. Discuss briefly the effectiveness of the organization, citing salient points of strength or weakness. Supplement the text with an organization chart reflecting the channels of authority.

2. SUPPORT

a. OWNERSHIP — Discuss briefly the pattern of ownership favored by the government for national civil air enterprises, indicating the extent to which the federal and municipal governments, and/or private enterprises are permitted to participate. The degree of foreign participation, if foreign investment is authorized, should be specified. The extent to which national civil air enterprises are permitted to invest in foreign aviation enterprises should likewise be specified.

b. SUBSIDIES — Describe any financial aid rendered civil aviation by the government, to include both direct and indirect subsidies, indicating the method, extent and purpose of such aid.

c. TRENDS — If applicable, state whether the policies adapted by the government have fostered the operational capabilities and effectiveness of civil aviation, referring briefly to any future developments indicated.

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C. International relations

1. AFFILIATIONS

Designate the international civil aviation Conventions to which the nation is signatory, and the international civil aviation organizations of which the nation is a member. Where appropriate, describe briefly the position taken by the government in regard to civil air policies of other nations (such as the U.S.-U.K. air policy).

2. AIR AGREEMENTS

a. FORMAL AIR TRANSPORT AGREEMENTS — List all formal air transport agreements and any interim agreements (or tacit understandings) contracted by the nation, and outline significant provisions. Discuss any important departure from the U.S.-sponsored standard form of agreement.

b. FOREIGN AIR CARRIER OPERATIONS — Indicate the foreign scheduled air carriers conducting services into the subject nation under the agreements, supplementing the text where feasible with a map depicting the services.

3. FOREIGN INFLUENCE

Discuss briefly any significant influence exerted on the national civil aviation effort by foreign nations, organizations or individuals. The discussion should include details of any specific foreign aid programs, such as the U.S. Economic Cooperation Administration as it relates to civil aviation. Any Communist influence should be specified.

D. Civil air enterprises

1. SCHEDULED AIR CARRIERS

a. HISTORY — Sketch briefly the history of each national scheduled air carrier, indicating the relative importance of the enterprises.

b. OWNERSHIP — List the interests having financial investment in each carrier, showing percentage participation, and commenting briefly on any foreign participants. Specify any investment by the national air carriers in foreign aviation enterprises.

c. ORGANIZATION — Discuss briefly the organizational set-up of the carriers, to include management and operations, and supplement the text with organization charts where appropriate.

d. OPERATIONAL STRENGTH — Tabulate for each airline company:

Name and headquarters
Capitalization (in U.S. dollar equivalent)
Operating base or bases
Number and type aircraft (operational and non-operational) by base of operations
Number and nationality of personnel (flight, ground, other) by base of operations

e. SCHEDULED AIR SERVICES — Discuss briefly the scope of the air services conducted by each carrier (domestic and international). Show the services currently in operation on a route map, and itemize the services on a table showing route terminals, ports of call, and number of flights per week. Note any significant charter-type services performed by these carriers.

f. AIR CARRIER PERFORMANCE — Indicate the general effectiveness of the carriers in providing transportation and comment briefly on such factors as adequacy and proficiency of personnel, utilization rate, accident rate, and adherence to schedules. Summarize any expansion or retrenchment programs.

2. MISCELLANEOUS AIR CARRIERS

Comment briefly on the activities of scheduled air carriers, charter, taxi, ambulance, crop dusting or other special air services. If the activities are of sufficient importance, present comparable data for the special carrier as is presented for the scheduled carrier companies. Otherwise, show in tabular form:

Name and headquarters
Type of activity
Number and type aircraft (operational and non-operational)
Number and nationality of personnel (by category of employment)

3. GOVERNMENT AND PRIVATE OPERATORS

List the government agencies, individuals and/or private business enterprises (other than scheduled or miscellaneous air carriers) employing civil transport aircraft, showing the number and type of aircraft owned by each, the number and employment of aviation personnel, and the purpose for which the aircraft are utilized.

E. Civil aviation training

1. PREPARATORY

Describe the attitude of the government toward fostering civil aviation schools and clubs and/or other private flying activities indicating whether sports flying or pre-military training is the primary objective. Discuss the extent to which these activities are supplying the military air arm with trained or partially trained personnel.

a. AVIATION SCHOOLS — Give name and location of all civil aviation schools, citing whether owned and operated by the government or by private interests. Include a brief résumé of the curriculum, the instructor staff, the student body, the aircraft or glider strength, other related school facilities and equipment, and general effectiveness of the schools.

b. **AERO CLUBS** — List all aero clubs, giving location and ownership. Indicate membership, aircraft or glider strength, related equipment and general effectiveness of the clubs.

c. **OTHER** — List and cite use of training type aircraft and related equipment other than in military use owned by the government or private interests (other than schools or clubs).

2. AIR CREW AND GROUND PERSONNEL

Describe all training activities carried out by the national scheduled, miscellaneous or other air operators. Give details of training programs under which nationals are provided aviation training in foreign states.

F. Services and supplies

1. MAINTENANCE INSTALLATIONS

Discuss briefly the maintenance installations owned and operated by the government, the air operators and/or other activities showing location, type of maintenance, standards of performance and adequacy and proficiency of maintenance personnel. Give an over-all estimate of maintenance capabilities. If pertinent, indicate maintenance arrangements with foreign nations and/or agencies.

2. AIRCRAFT AND SPARE PARTS

Discuss briefly the origin of aircraft and spare parts, indicating the general condition of aircraft and the adequacy of spare parts stocks.

3. PETROLEUM PRODUCTS

State the supply position of civil air activity with respect to aviation gasoline and lubricating oil (with a cross-reference to Subsection 62, C, Petroleum, for details).

G. Civil air facilities

1. AIRFIELDS

Discuss briefly on a broad rather than a detailed basis the general adequacy of the airfields assigned for civil aviation use. Include a reference to Subsection 83, K and a general discussion of ancillary facilities such as ground handling and servicing equipment and terminal facilities. Cite joint use of airfields by military and civil aircraft.

2. OPERATIONAL AIDS

a. **AIDS TO NAVIGATION** — Discuss the aids to navigation, equipment used, the operating agency, and reliability of service including a reference to radio frequencies of major airports.

b. **AIRWAYS** — Discuss airways, flight traffic controls along airways, and aviation communications facilities between ground stations. Broadly cover traffic control in vicinity of airfields. Air-

ways, where existent, may be schematically shown on a map or chart.

c. **METEOROLOGICAL SERVICES** — Briefly summarize meteorological services to aircraft.

d. **AVIATION SCHOOLS AND AERO CLUB FACILITIES AND EQUIPMENT**

H. Military potential

1. AIRCRAFT AVAILABILITY

Recapitulate from Subsections D and E above the total civil aircraft strength of the nation, showing totals by types. Estimate for each type the percentage normally operational, discussing maintenance, personnel or other factors upon which the estimate is based.

2. PERSONNEL READINESS

Recapitulate from Subsections D and E the total number of pilots and other aviation personnel engaged in civil air activities, showing totals by type of employment. Indicate the air reserve or other personnel with military aviation training in each category.

3. MOBILIZATION PLANS

Discuss in detail plans for integrating civil air activities into the military air arm.

I. Means of identification

Describe the markings, emblems or insignia used to identify national civil aircraft or to distinguish major individual owners; and uniforms and insignia worn in any phase of the civil aviation effort. Black and white page-sized drawings or photographs with color notations may be utilized.

J. Personalities

Name the important personalities connected with civil aviation including officials of the government, the airline companies and any other important civil aviation activity, showing the position held by each. Supply a brief biographical sketch, to include aviation experience and political affiliations, of the leading personalities.

K. Comments on principal sources

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Section 38. Telecommunications

A. General

1. BACKGROUND AND SIGNIFICANCE

Brief history of telecommunications, including basic reason for development of telecommunications facilities (political, economic, military)

Relative importance of different media

Extent of integration of various media

Over-all telecommunication coverage, adequacy, and service capabilities

General plans for expansion or change

Specific effect of special topographic or meteorological conditions on telecommunications

2. ADMINISTRATION AND CONTROL

Government administration (including chart)

Personnel:

Names of top-level personnel

Educational facilities for technical personnel

Technical abilities of native personnel and use of foreign personnel in operation or maintenance of facilities

Censorship policy, regulations, and procedure, and location of censorship offices

3. SOURCE OF EQUIPMENT

Imports and exports of raw material and telecommunications materiel

Domestic production of telecommunications materiel

Support provided by domestic research and development

4. MAJOR ASPECTS OF PRIVACY SYSTEMS

B. Military appreciation and vulnerability

1. MILITARY USE OF TELECOMMUNICATIONS SYSTEMS

National policy concerning use of telecommunications facilities by the military in peace time and war time

Reserve capacity available for military use

Capacity available by confiscation

Adaptability of systems and facilities to military use

2. VULNERABILITY

Physical and electrical features which contribute to vulnerability or lack of vulnerability, including

critical aspects of power and emergency power sources, and aspects especially susceptible to damage by sabotage

Potential bottlenecks—points of heavy traffic with minimum possibility of rerouting in event existing service is disrupted.

C. Domestic facilities

1. GENERAL

Special government administrative controls concerning domestic facilities, including assignment of call letter blocks and prescribing amateur regulations

Operational organizations and their relationship to other domestic or foreign organizations:

Names of key personnel of operating organizations
Number, nationalities, and efficiencies of personnel in operating organizations

2. TELEPHONE

Adequacy, efficiency, and dependability of telephone service; interconnection and integration with other facilities

Analysis of service rendered by systems shown on accompanying wire map:

Capability to accommodate centers of population and geographic areas

Patterns and significance of various networks

Traffic capacities of circuits and exchanges

Operating condition of equipment

Services offered by special and private networks (utilities, railways, pipelines, airfields, etc.)

Services other than telephone provided by the systems

Use of power lines for transmission of telecommunications

Location, availability, and capabilities of repair shops and personnel

Location and content of major warehouses or depots

3. TELEGRAPH

Same type coverage as for telephone. If all telephone and telegraph systems use joint facilities, Subsections 2 and 3 may be combined

4. RADIO

a. COMMUNICATIONS — Adequacy, efficiency, and dependability of service; interconnection and integration with other facilities

Analysis of service rendered by stations and networks shown on accompanying radio map:

Capabilities to accommodate centers of population and geographic areas
 Present and potential traffic capacities
 Operating condition of equipment
 Significance of amateur potential
 Services offered by special communications networks
 Facsimile service

Location, availability, and capabilities of repair shops and personnel

Location, availability, and content of major warehouses or depots

b. BROADCASTING (INCLUDE FM AND TELEVISION) — Adequacy, efficiency, and dependability of broadcasting service; interconnection and integration with other facilities

Analysis of service rendered by stations and networks shown on accompanying radio map:

Present and potential country coverage and approximate service areas of stations and networks
 Services offered by special broadcast networks
 Services offered by public address systems
 Operating condition of equipment
 Critical aspects of relay and remote control arrangements

Number, types, and distribution of receiver sets
 Location, availability, and capabilities of repair shops and personnel

Location, availability, and content of major warehouses and depots

c. OTHER

Major aspects of civil radar, navigational devices, meteorological and ionospheric stations, and direction finders

Use of radio link

D. International facilities

1. GENERAL

Adequacy, efficiency, and dependability of service
 Analysis of service capabilities of facilities shown on accompanying telecommunications map:

Present and potential traffic capacities and effect on all telecommunications
 Names of key personnel of operating organizations
 Number, nationalities, and efficiencies of personnel in operating organizations

2. SUBMARINE CABLES

Adequacy, efficiency, and dependability of submarine cable service; integration and interconnection with other facilities

Analysis of service capabilities of cables shown on accompanying country telecommunications map:

Present and potential traffic capacities and effect on all telecommunications
 Operating condition of cables and terminal equipment

Number of international circuits
 Cable huts and terminals

Location, availability, and capabilities of repair shops and personnel

Location, availability, and content of major warehouses or depots

3. LANDLINES

Adequacy, efficiency, and dependability of service of lines shown on accompanying country map; integration and interconnection with other telecommunication facilities

Analysis of service capabilities:

Present and potential traffic capacities
 Operating condition of lines and equipment
 Significance of international transit routes
 Significance of points where lines cross the border

Location, availability, and capabilities of repair shops and personnel

Location, availability, and content of major warehouses or depots

4. RADIO (Communications, Broadcasting, Radiotelephone, Radiotelegraph and Facsimile)

Adequacy, efficiency, and dependability of service; interconnection with other countries and integration with domestic facilities

Analysis of service capabilities:

Present and potential traffic capacities
 Operating condition of equipment
 International broadcast coverage
 Number of international circuits

Major aspects of monitoring, jamming, clandestine, and Voice of America relay stations

Location, availability, and capabilities of repair shops and personnel

Location, availability, and content of major warehouses and depots

E. Comments on principal sources

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER IV

SOCIOLOGICAL

Section 40 Introduction
Section 41 Population
Section 42 Characteristics of the People
Section 43 Religion, Education, and
Public Information
Section 44 Manpower
Section 45 Health and Sanitation
Section 46 Public Welfare

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Chapter IV - Sociological

OUTLINE

SECTION 40. INTRODUCTION

- A. General character of the society
- B. Historical setting

SECTION 41. POPULATION

- A. General
- B. Size and geographical distribution
- C. Population structure
- D. Population change
 - 1. Historical growth
 - 2. Vital statistics
 - 3. Immigration and emigration
- E. Population problems and policy
- F. Comments on principal sources

SECTION 42. CHARACTERISTICS OF THE PEOPLE

- A. General
- B. Physical characteristics
- C. Cultural characteristics
 - 1. Languages
 - 2. Social structure
 - 3. Social values and patterns of living
 - 4. Artistic and intellectual expression
- D. Attitudes and reactions of the people
 - 1. Nationalistic attitudes
 - 2. Attitudes toward internal racial and ethnic groups
 - 3. Attitudes toward foreign nations, toward foreigners in general, and toward the United States and Americans.
 - 4. Attitudes toward international organizations
 - 5. Attitudes toward war and preparation for national defense
 - 6. Wartime morale of the civilian population
- E. Minorities
- F. Comments on principal sources

SECTION 43. RELIGION, EDUCATION, AND PUBLIC INFORMATION

- A. General

B. Religion

- 1. Distribution of principal faiths
- 2. Religious organization
- 3. Social and political significance of religion in the country

C. Education

- 1. Educational level of the population
- 2. Educational system, including adult education
- 3. General content of instruction

D. Public information

- E. Biographies of key figures in religion, education, and public information, (optional)

F. Comments on principal sources

SECTION 44. MANPOWER

- A. General
- B. Manpower analysis
 - 1. Manpower in relation to total population
 - 2. Labor force
- C. Standards and practices of employment
 - 1. Utilization of potential labor supply
 - 2. Wages and working conditions
 - 3. Labor market, hiring practices and mobility
- D. Labor relations and organization
 - 1. Labor relations and problems
 - 2. Organization and control of labor
 - 3. Labor legislation and government policy
 - 4. Biographies of key labor figures (optional)
- E. Comments on principal sources

SECTION 45. HEALTH AND SANITATION

- A. General
- B. Environmental factors affecting health
 - 1. Topographic and climatic factors
 - 2. Nutritional factors
 - 3. Plant and animal factors

- | | |
|--|-------------------------------------|
| C. Public utilities in relation to health | H. Medical research and development |
| 1. Water | I. Comments on principal sources |
| 2. Waste disposal | |
| D. Diseases | |
| E. Public health administration and practice | SECTION 46. PUBLIC WELFARE |
| F. Medical care potential | A. General |
| 1. Medical personnel | B. Standards of living |
| 2. Hospitals | C. Social problems |
| 3. Medical supplies | D. Social security |
| 4. Industrial hygiene | E. Comments on principal sources |
| G. Medical training and other institutions | |

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Section 40. Introduction

A. General character of the society

This Subsection should provide a concise synthesis of the general character of the society and civilization. It should not be merely a summary of materials elaborated in the remainder of the chapter, but an over-all picture, answering questions such as the following:

- 1) What are the main patterns and trends of social life and social organization? Are they based primarily on an agricultural or industrial tradition, on a mixed or other type of economy?
- 2) Is the society stable or unstable, is it confused, disunited, or imbued with a sense of common destiny and mission?
- 3) What is the status of, and the relationships among, the various classes, races, religious denominations, nationality or language groups?
- 4) What are the dominant social motives of the average citizen—economic, cultural, religious, racial, etc.?
- 5) Do the people have an individualistic or collectivist bent or tradition; are these opposite tendencies harmoniously combined or at war with each other?

encies harmoniously combined or at war with each other?

6) What is the pattern of public opinion formation and of individual thought? For example, are the people predominantly logical, romantic, pragmatic, or otherwise in their approach to individual and national problems? Are they prone to compromise, to legalistic attitudes, to uncritical self-justification? Is it easy or difficult to influence them by propaganda?

B. Historical setting

Give a brief résumé of such facts in this history of the country as are essential to an understanding of the origins of the people, their prevailing traditions, and their orientation toward neighboring and related peoples. The form of presentation may be either chronological or analytical but should not be an exhaustive chronicle of events. Omit so far as possible political background material, which should be presented in CHAPTER V, SECTION 50. Effort should be made through coordination to avoid duplicating or omitting important background material in these two sections.

Section 41. Population

A. General

This Subsection should provide an appropriate approach to the material in the remainder of the section. It should include a *brief* statement of the major aspects of population size, distribution and change and their significant relationships with economic and other problems of the country concerned. It should not be merely a digest of what follows.

B. Size and geographical distribution

Give brief comparative data on the size and density of the population as of postwar census or estimate. Present a table of area and population in the chief administrative subdivisions (provinces, departments, states, etc.) with number of persons per square mile, preferably accompanied by a map of population density for location purposes. Indicate the general pattern of settlement—orientation toward the sea, river commerce, industrial area, agricultural plains, etc.

Give percent of population, rural and urban—is it concentrated in major agglomerations or dispersed? Tabulate population in larger cities (postwar census or estimate for a recent date) and (if possible) in the chief metropolitan areas. Discuss the role of internal migration in the redistribution of population. Indicate the chief origins, destinations and causes of internal migratory movements, particularly rural-urban migration.

C. Population structure

Tabulate population (in thousands) classified by five-year age groups (0-4, 5-9, 10-14, . . . 65 and over) for males, females, and total as of postwar census or estimate for January 1, of the year of NIS publication. Is there a significant deficit of males, and, if so, at what ages? Is it customary for all adults to marry or is there a large spinster population arising from late marriage or other factors?

Is it a young or an old population? Indicate percent of the total in working ages (e.g., 15-64) and in dependent ages (e.g., 0-14 and 65 and over). Is there a heavy burden of old age dependency, child dependency, or both relative to the working population? Note any significant abnormalities in the age structure (cf. deficits of males in young working ages owing to war losses).

Give best available estimates of military casualties, civilian casualties, and total population loss

attributable to World War II. (Cross-reference to SECTION 80, E, Manpower.)

D. Population change

1. HISTORICAL GROWTH

Cite dates and figures for national censuses and give brief comparisons with neighboring or rival countries. Has the country been a population vacuum (cf. France) or a source of outward population pressure (Germany, Japan)? What are the factors affecting growth and their present trends?

2. VITAL STATISTICS

Tabulate births, deaths, and excess of births over deaths for postwar years. Give vital rates per 1,000 population for postwar years and such earlier dates (e.g., averages for 1921-1925, 1926-1930, 1931-1935, and 1936-1939) as are necessary to give proper perspective. If possible, give infant mortality rates (infant deaths in first year of life per 1,000 births) for the same dates.

3. IMMIGRATION AND EMIGRATION

If available, give table showing immigrants by chief country of origin and emigrants by chief country of destination for postwar years and summarized for prewar periods (cf. vital rates above). Indicate the residue of migration as measured by the number of foreign-born and the number of aliens and naturalized citizens. Discuss war migrations and population dislocations (if any).

E. Population problems and policy

Indicate prospective future population trends. Discuss problems presented by growth, decline, or distribution of the population, together with the attitudes of the people and the government towards these problems. Indicate migration policies and discuss the present and prospective role of migration and settlement (e.g., in relieving population pressure or in developing thinly populated areas).

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

~~CONFIDENTIAL~~

PAGE IV-3

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with col-

lection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 42. Characteristics of the people

A. General

This Subsection should provide an appropriate approach to the material contained in the remainder of the section. It should indicate briefly the crucial physical and cultural characteristics that have determined national strength or weakness and national solidarity or disunity, as well as susceptibility to foreign psychological influences. It should not be merely a digest of what follows.

B. Physical characteristics

Describe distinctive physical and racial characteristics such as typical stature, coloring, facial structure, physical vigor, etc.

Identify the main racial groups, their numbers, their regional distribution, and their historical origins. In mixed populations data that can aid in distinguishing individuals according to racial or sub-racial groups are important.

C. Cultural characteristics

1. LANGUAGES

Designate the major languages commonly spoken in the country, indicating their localized distribution with maps, and show the percentage of the population that habitually speak each language.* Indicate the degree to which there is local knowledge of English or other common foreign languages. Indicate briefly the extent to which dialects are spoken and the extent to which speakers of the different dialects can understand each other. Maps showing the distribution of significant dialects are useful.

2. SOCIAL STRUCTURE

a. CLASS STRATIFICATION — Describe and analyze the class system of the country, indicating the basis upon which the important class lines are drawn, whether racial, religious, economic, or other. What degree of social mobility exists?

What are the trends with respect to the size and composition of the social classes? What are the implications of class division as regards political activity and national solidarity? Do some classes combine for political power over others? What combinations of this sort now exist? Are class distinctions forgotten in a national emergency?

b. SOCIAL ORGANIZATIONS AND MOVEMENTS — Describe important social organizations and movements other than those formed on the basis of class or family; such as, secret societies, cooperatives, lodges, business and professional associations, youth movements, and other groups not covered elsewhere. Indicate the professed and apparent real aims, the number and character of membership. What factors determine status, prestige, and leadership? Estimate the financial resources, and influence of such organizations as centers of group action and of attitude formation.

c. FAMILY — Explain the characteristic forms of kinship groupings, whether the single family, joint family, clan, etc., with emphasis on differences from the United States.

3. SOCIAL VALUES AND PATTERNS OF LIVING

Describe customs and characteristic ways of life, rural or urban, which are of significance as regards the maintenance of national unity, actual or potential military power, relations with foreigners, or where applicable the introduction of Western ideas and techniques. For example, do the social values emphasize rigid conformity or permit considerable freedom for deviant behavior? Where these are significantly different from the United States, diagnose basic attitudes toward life and death, toward work and leisure, toward change, toward authority and the role of the individual. Is there emphasis on obedience to authority? What are the most effective sanctions motivating or inhibiting behavior, e.g., prestige, material rewards, ostracism, legal punishments, etc. In public life are there tendencies toward nepotism, indifference to corruption, etc., which have implications for national unity? Are there significant

* The OWI Linguistic Censuses of Europe and Far East gives these proportions for many countries before the war. Figures can be adjusted for any transfer of language groups that occurred during or since World War II.

JUNE 1951

SOCIOLOGICAL

~~CONFIDENTIAL~~

rural-urban, ethnic and class differences in social values which threaten national solidarity?

4. ARTISTIC AND INTELLECTUAL EXPRESSION

Briefly describe the major forms of national artistic and intellectual expression. Are they founded on a well-developed native tradition or borrowed? Do artists and intellectuals enjoy prestige in the society? To what extent are artistic forms and "schools of thought" important as national and ideological symbols?

D. Attitudes and reactions of the people

Discuss under the headings given below. Emphasize the more basic and lasting attitudes rather than current public opinion. Where appropriate make cross-reference to relevant sections of CHAPTER V.

1. NATIONALISTIC ATTITUDES

Views of the people with respect to their own country and its aggrandizement. Distinguish between attitudes toward the country itself and toward the government in power. What are the established national "symbols" (e.g., caricatures, slogans, national anthem, flag), and what is their significance? What are the aspirations of leaders and of key groups for the future of their country?

2. ATTITUDES TOWARD INTERNAL RACIAL AND ETHNIC GROUPS

Consider the attitudes of various segments of the population toward each other. Examples: Anti-Semitism, Czech-Sudeten German attitudes, white-colored relationships, etc.

3. ATTITUDES TOWARD FOREIGN NATIONS, TOWARD FOREIGNERS IN GENERAL, AND TOWARD THE UNITED STATES AND AMERICANS

Describe reactions to manifestations of American civilization with which they come in contact. Stress special aspects evoking good will or antagonism.

4. ATTITUDES TOWARD INTERNATIONAL ORGANIZATIONS

Especially the United Nations or regional groupings for defense or other purposes. As a means of comparison, earlier attitudes toward the League of Nations may be included.

5. ATTITUDES TOWARD WAR AND PREPARATION FOR NATIONAL DEFENSE

What is the prevailing attitudes as regards military training?

6. WARTIME MORALE OF THE CIVILIAN POPULATION

Consider the attitudes and morale of the civilian population during World War II or the last war in which the country engaged.

E. Minorities

Indicate the numerical importance and location of the significant groups (minorities, whether created by an ethnic, religious, economic, or historical differentiation). If a map can contribute to clarity of presentation, prepare one. Describe each major group, emphasizing the significant distinctive characteristics and the extent of divergence from what may be regarded as the national dominant norm.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 43. Religion, Education, and Public Information

A. General

This Subsection should provide an appropriate approach to the material contained in the remainder of the section. It should include a brief statement of the role and relative importance of religious, educational, and informational institutions in shaping the life and outlook of the people. It should not be merely a digest of what follows.

B. Religion

1. DISTRIBUTION OF PRINCIPAL FAITHS

Give the percentage of the inhabitants adhering to each. Include important sects. Indicate whether specific religious faiths are linked with specific ethnic groups. Indicate extent to which formal church adherence actually reflects religious faiths and practices.

~~CONFIDENTIAL~~

PAGE IV-5

2. RELIGIOUS ORGANIZATION

Give a brief account of the organizational structure of each major religious group, and discuss its buildings, schools, churches, etc.

3. SOCIAL AND POLITICAL SIGNIFICANCE OF RELIGION IN THE COUNTRY

Indicate the attitude of the government toward religious groups. Is there an established church? How do religious affinities and differences affect national unity? Are there sympathies or antipathies toward other countries for religious reasons? Indicate features of religion which have an important bearing on the daily life of the people or on their relations with and attitudes toward foreigners.

C. Education**1. EDUCATIONAL LEVEL OF THE POPULATION**

Discuss degree of literacy and general educational achievement.

2. EDUCATIONAL SYSTEM, INCLUDING ADULT EDUCATION

Indicate briefly the general organization of the educational system, from elementary schools through the universities, and its position in the governmental structure; the facilities for vocational and industrial training and graduate education; the role of research institutions. Indicate notable inadequacies of the educational system. Discuss the extent and effectiveness of efforts to reduce illiteracy or broaden educational opportunity.

3. GENERAL CONTENT OF INSTRUCTION

The control of government over such content; the character of the education received; its ideological orientation and its effect on attitudes, especially toward foreigners.

D. Public information

Give a concise survey of methods of disseminating news; e.g., via newspapers, magazines, radio, motion picture, etc. Indicate adequacy of coverage of these various media. (Cross-reference to SECTION 58.)

List the principal domestic newspapers and radio chains and indicate whether each is government operated or privately operated. With reference to newspapers, for the sake of uniformity, particulars should be charted as shown below. For domestic magazines, indicate the period of publication, the circulation, and the class of readers appealed to; if the number and variety of magazines justifies the use of a tabular form as with newspapers, use such form. As regards domestic motion pictures, indicate the number and distribution, the audience volume, the source of pictures shown, and the controlling interests. Give a succinct evaluation of effect upon the population of public information and non-political propaganda conveyed by the above-mentioned domestic media.

List newspapers and radio chains which are foreign sponsored. List the foreign elements involved. For foreign-sponsored magazines, indicate the period of publication, the circulation, and the class of people appealed to. List the foreign elements involved. If the number and variety of newspapers and magazines justifies the use of a tabular form such as the one below, use such a form. As regards foreign-sponsored motion pictures, indicate the number and distribution, the audience volume, the source of pictures shown, and the controlling interest. Include an account of any news or other information activity that originates outside the country, e.g., cultural activities of foreign embassies, radio broadcasts from Cairo to Arab States, etc. Give a succinct evaluation

FIGURE 43-1. PRINCIPAL NEWSPAPERS OF (COUNTRY), (DATE)

NAME, PLACE, AND TIME OF PUBLICATION	LANGUAGE(S) IN WHICH PRINTED	CIRCULATION	KEY PERSONNEL (PUBLISHER, EDITOR, EDITORIAL WRITERS, ETC.)	COMMENTS

of the effect upon the population of public information and non-political propaganda conveyed by the above-mentioned foreign-sponsored media. Political propaganda should be discussed in SECTION 58, the emphasis in this section being on media and their effectiveness rather than on political content.

E. Biographies of key figures in religion, education, and public information (optional)

This Subsection should present a succinct statement of essential background data on key people who have or are likely to have a vital role in these fields.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 44. Manpower

A. General

The purpose of this Subsection is to provide an appropriate approach to a full consideration of the problem of manpower and its capabilities. It should not be merely a digest of what follows in the remainder of the Section. It should present an evaluative summary in terms of such basic characteristics as a predominantly agricultural population with limited adaptation to industry, or a tradition of significant craft workmanship, or considerable maturity in mass production. Seasonal migration of working manpower as well as trends from rural to manufacturing or service occupation should be discussed. The discussion should indicate the social framework for labor, including any religious or other traditional aspects affecting both the present and potential status and productivity of the total work force. The nature and extent of labor organization should be discussed as a segment of the total situation. Brief consideration should be given the amount and extent of dependency within the population, and the nature of those groups which outside of the labor force, may constitute a potential source of manpower or an obstacle to its fuller utilization.

B. Manpower analysis

In this Subsection a brief but comprehensive appraisal of the labor potential is desired in relation to the total population and its dependent elements. (Cross-reference to SECTION 80 and appropriate sections of CHAPTER VI.)

1. MANPOWER IN RELATION TO TOTAL POPULATION

a. **GENERAL MANPOWER POSITION** — Taking into account all the pertinent elements in the following Subsection 2, give a brief summary and evaluation of manpower potential in relation to the total population. Show the growth of the labor force, past and future, and make a comparison with other countries, where relevant, for proportions of various elements in the labor force (by sex).

b. **RESIDUAL POPULATION** — Dependent groups: infants and other dependent children, old people, unfit to work, the helplessly crippled and bedridden, the insane and chronically ill, and confined criminals and prisoners. Estimate the extent and amount of burden on the working population.

2. LABOR FORCE

It is expected that the following analysis will not only estimate the size or proportion and occupational distribution (labor force particularly) but also will evaluate the capabilities of the various categories and groups within the labor force.

a. **DISTRIBUTION BY INDUSTRY AND OCCUPATION** — Where possible show distribution in tabular form by 1) industry group, 2) occupation, and 3) occupational status (employers, self-employed, employees). This will include all categories of employment as well as the armed services. The same form can not be used for all countries because of differences in the methods of reporting labor statistics (e.g., for many countries, breakdowns will be available for either industry group or occupation, but not both). The data for each occupa-

~~CONFIDENTIAL~~

tional group in the table should show number of males, females, total, percent of total labor force. Compare the industrial and occupational structure of the labor force with neighboring or otherwise relevant countries.

Show the age-sex structure of the labor force with special reference to young workers, women and older workers and possible expansion of these groups when manpower demand requires.

Indicate the significant aspects of geographic distribution of the workers, especially as to concentrations of types of workers and skills in specific localities. State whether any trades or other activities are the special province of any particular religious, ethnic, or other groups.

Analyze the characteristics of the labor supply as to the proportion of skilled and unskilled workers. Discuss the productivity of labor in agriculture and other important branches of production, with special reference to human and technological factors affecting output, e.g., ability and willingness of labor to learn new techniques, interchangeability of manual labor, government and union restrictions, managerial ability, etc.

b. LABOR RESERVE

(1) *Unemployed persons* — These are part of the labor force, are available, but are not actively employed. They include migrants, refugees, displaced persons, workers laid off through cut-backs, those in process of changing jobs, unpaid helpers (dependents, usually family), and victims of misfortune (on relief). Discuss from standpoint of availability and qualification to work (usability).

(2) *Potential reserve* — Discuss reserve labor supply: housewives, students, qualified and fit overage persons, children, under-employed, and partially disabled and certain types of convicts and prisoners.

C. Standards and practices of employment

1. UTILIZATION OF POTENTIAL LABOR SUPPLY

Discuss method and degree of utilization, e.g., is there a feudal system or not? Is labor used to its full capacity? Indicate any institutional or other handicaps affecting labor's efficiency. Unemployment is one factor which operates against full utilization, and its causes should be briefly discussed. What industries are most affected?

2. WAGES AND WORKING CONDITIONS

Describe methods of wage determination. Indicate briefly trends of wage rates and real earning, and the effects on these of government wage-price policy. Where possible, show the range of wage rates paid skilled, semi-skilled, and unskilled labor, and of salaries paid white-collar and professional

workers. Specify wage rates for both men and women; perhaps also beginners' pay—apprentices, young workers. Indicate "low-wage" and "high-wage" industries and trend in the wage gap between them. In those economies where compensation is paid wholly or partly in kind, indicate nature of payment. What additions to real income are derived from such items as social services and family allowances, old age pensions, sickness insurance, etc.? Indicate briefly the character of working conditions in general and in important industries. (Indicate items such as standard of living, etc., covered by cross-reference to Subsection 46, B).

3. LABOR MARKET, HIRING PRACTICES AND MOBILITY

Discuss employed methods of recruiting labor (e.g., the systems of apprenticeship, labor contracts, training with pay, conscription, etc.).

D. Labor relations and organization

1. LABOR RELATIONS AND PROBLEMS

What is the relation between the native employer and the employee he hires? What are the specific sources of friction and the causes of problems which require solution, and what has been the experience in the handling and eventual resolution of these problems? Does the government play an important part in this field? If so, how? Indicate the extent and character of collective bargaining, the number and duration of strikes and lockouts, and methods of dealing with industrial disputes. Are there significant developments in the form of industrial councils and boards, labor courts (cross-reference to SECTION 52), and workshop organizations? To what extent are employers organized? Discuss attitudes toward non-union labor and non-conformity within the organization.

2. ORGANIZATION AND CONTROL OF LABOR

List the national federations of labor organizations, each with its major constituents and their separate and total membership. Describe briefly the characteristic structure, tactics, aims, and policies of organized labor. Do the unions have any international affiliations? What is their attitude toward:

The wage-price policy of the government?
Efforts to increase labor productivity?
Vocational training?
The relocation of industry?
The use of foreign labor?
National defense?

By cross-reference to SECTION 53, indicate briefly the political affiliations of organized labor and the political role that it plays. To what extent is there participation of labor in the formulation of national political and economic policy? Is labor well stabilized, or is it an element making for unrest within

JUNE 1951

SOCIOLOGICAL

~~CONFIDENTIAL~~

the country? Discuss the attitude of the government and public opinion toward organized labor.

3. LABOR LEGISLATION AND GOVERNMENT POLICY

Give a brief, evaluative summary of the nature and scope of legislation and policy affecting:

The right to organize, strike, and bargain collectively.
Wages, hours, and conditions of employment.
The employment of women and children.
Social insurance (cross-reference to Subsection 46, C).
Is there a government manpower policy-planning, guidance or control (budgeting, etc.) of turnover, transfer between industries, etc.? Are regulations enforced? In this connection a chart showing the structure of the ministry of labor and its enforcement agencies is desirable.

4. BIOGRAPHIES OF KEY LABOR FIGURES (optional)

This Subsection should deal with key people who have or are likely to have a vital role in labor

organization. Biographies of labor leaders with political standing are to be cross-referenced to SECTION 59.

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 45. Health and Sanitation

A. General

This Subsection is provided to permit, where appropriate, a preliminary approach to the treatment of material contained in the remainder of the section. It should be brief and may be used in whatever manner seems most desirable.

B. Environmental factors affecting health

1. TOPOGRAPHIC AND CLIMATIC FACTORS

This should be a brief account of the relationship of these factors to the health of the native people and to the health of an invading force.

2. NUTRITIONAL FACTORS

Include general nutritional status and dietary habits of the people, native food supply problems and resources.

3. PLANT AND ANIMAL FACTORS

Include pertinent information concerning poisonous and allergenic plants, animal vectors of disease, and dangerous wild animals.

C. Public utilities in relation to health

1. WATER

Discuss relation to health, adequacy of available supplies, vulnerability to contamination. Refrigeration.

2. WASTE DISPOSAL

Discuss available facilities (if any) and native methods of disposal of human excreta, garbage, and dry wastes.

D. Diseases

1) Diseases which may affect an invading military force. Discuss prevalence of diseases of special, potential, and minor military importance.

2) Diseases prevalent among native peoples. Discuss prevalence of those diseases causing high morbidity or mortality rates among native peoples. Include supporting data.

E. Public health administration and practice

Discuss public health regulations (laws, ordinances, quarantine regulations, etc.); civilian health organizations, including per capita expenditure on public health; and military medical organization.

F. Medical care potential

1. MEDICAL PERSONNEL

Give quantitative data and qualitative appraisal.

2. HOSPITALS

Give quantitative data and qualitative appraisal.

~~CONFIDENTIAL~~

PAGE IV-9

3. MEDICAL SUPPLIES

Discuss local availability, quality, and suitability. Include self-sufficiency in pharmaceuticals and biologicals.

4. INDUSTRIAL HYGIENE

Discuss organization, administration, types of service, and extent of coverage.

G. Medical training and other institutions

Discuss educational facilities (medical, dental, nursing, pharmacy, midwifery, veterinary, and other schools), and laboratories for clinical diagnostic work and pharmaceutical manufacturing.

H. Medical research and development

Discuss available resources in medical science manpower; available teaching and laboratory facilities;

significant current research projects; and ability to synthesize drugs which normally are imported.

I. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 46. Public Welfare**A. General**

This Subsection should provide an appropriate approach to the material contained in the remainder of the section. It should include a *brief* statement of the level of public welfare and its relationship to national strength or weakness and unity or disunity. It should not be merely a digest of what follows.

B. Standards of living

Indicate significant differences from U.S. in type and adequacy of diet, clothing, and housing, including such items as electrification, running water, plumbing, heating, etc. Are there major class and regional variations?

Discuss differences between actual levels of living and accepted standards of adequacy. Is this gap a cause of general unrest and discontent? (Cross-reference to Subsection 44, C.)

C. Social problems

This Subsection should cover any major social problem not discussed elsewhere. Have living conditions and other sources of tension created noteworthy social problems such as extensive slums or excessive rates of crime, juvenile delinquency, begging, vagabondage, etc.?

D. Social security

This Subsection should deal with important public and private efforts to protect and assist those in need of help, including unemployment and other social insurance, old age pensions, maternity aid, aid to dependent children, aid to the aged and physically handicapped, provisions for emergency relief, etc. The discussion should include an appraisal of the public conscience in regard to poverty, disease and unemployment. Is the society consciously pursuing higher standards, and if so, what ideals of social welfare are dominant?

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER V

POLITICAL

Section 50 Introduction
Section 51 The Constitutional System
Section 52 Structure of the Government
Section 53 Political Dynamics
Section 54 Public Order and Safety
Section 55 National Policies
Section 56 Intelligence and Security
Section 57 Subversive
Section 58 Propaganda
Section 59 Biographies of Key Personalities

CENTRAL INTELLIGENCE AGENCY
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Chapter V - Political

OUTLINE

SECTION 50. INTRODUCTION

SECTION 51. THE CONSTITUTIONAL SYSTEM

- A. General
- B. Constitution
 - 1. Origin and development
 - 2. Principal features
- C. Constitutional position of the legislative, executive, and judicial branches
- D. Civil and religious rights and privileges
- E. Comments on principal sources

SECTION 52. STRUCTURE OF THE GOVERNMENT

- A. General
- B. Central government
- C. Regional government
- D. Local government
- E. Dependencies and associated states
- F. Comments on principal sources

SECTION 53. POLITICAL DYNAMICS

- A. General
- B. Political parties
- C. Electoral procedures
- D. Pressure groups
- E. Comments on principal sources

SECTION 54. PUBLIC ORDER AND SAFETY

- A. General
- B. Police system
- C. Penal system
- D. Comments on principal sources

SECTION 55. NATIONAL POLICIES

- A. General
- B. Domestic policies
- C. Foreign policies
- D. National defense policies
- E. Comments on principal sources

SECTION 56. INTELLIGENCE AND SECURITY

- A. General
- B. Domestic intelligence
- C. Foreign intelligence
- D. Comments on principal sources

SECTION 57. SUBVERSIVE

- A. General
- B. Soviet and Communist subversive activities
- C. Other subversive activities
- D. Comments on principal sources

SECTION 58. PROPAGANDA

- A. General
- B. Domestic propaganda
- C. Propaganda directed abroad
- D. Propaganda by foreign countries
- E. Comments on principal sources

SECTION 59. BIOGRAPHIES OF KEY PERSONALITIES

- A. General
- B. Biographies
- C. Comments on principal sources

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OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Section 50. Introduction

This Section should show the strategic significance of the political aspects of the country. It should include a brief over-all evaluation of the political strength and international influence of the nation in terms of degree of national unity, will to independence, strength of purpose, fighting spirit, relative stability and efficiency of the political system, locus of power, and basic objectives of the government and the nation at home and abroad. It should include a brief political history, the specific purpose of which is to show the im-

pact of history upon present-day political attitudes and institutions. (Political background material in SECTION 50 should be so correlated to the discussions of historic setting in SECTIONS 40 and 60 that together they will give a rounded picture of significant social, economic and political history. The Section should serve as a political introduction both to the country and the chapter, drawing upon chapter content but not presenting a summary.)

Section 51. The Constitutional System

A. General

This Subsection should provide an appropriate approach to the treatment of the material contained in the remainder of the Section. It should be brief and should show the significant historical background of the nation's constitutional system, taking into account such factors as traditional respect for and adherence to constitutional processes. Features which differentiate the present constitution from those of the past and of other countries may also be briefly considered. The Subsection should indicate the relationship between the constitutional system and the degree of national political stability and efficiency.

B. Constitution

1. ORIGIN AND DEVELOPMENT

This Subsection should present the immediate background of the formation of the constitution, the political, economic and social groups dominant in its adoption, the foreign influences present, and the extent to which it represented public opinion at the time of adoption.

2. PRINCIPAL FEATURES

This Subsection should give a summation of the features of the constitutional system needed to grasp its character, including a definition of the type of government established, the relationship between the provisions of the constitution and the actual practices of the government, its economic and social provisions, and unusual provisions. Attention should also be given to the degree of flexibility and to constitutional and legal provisions for amendment compared with actual practices so as to indicate the popular control over constitutional change, and to the provisions for, and actual practice in, handling disagreement in interpreting the meaning of the constitution.

C. Constitutional position of the legislative, executive, and judicial branches

Briefly compare the constitutional and legal position and powers with actual practice. (Reserve description of organization and procedure of executive, legislative, and judicial agencies for SECTION 52.)

D. Civil and religious rights and privileges

This Subsection should include constitutional and legal provisions and a statement of the actual situation in respect to civil and religious rights and privileges, considering especially freedom of speech, press, radio, assembly, organization, and religion, but also including other rights and privileges peculiar to the country. The rights and privileges of foreigners, particularly Americans, should be examined and compared with those of nationals. With respect to the suffrage, only law and practice concerning the qualifications of electors, such as age, sex, and property should be considered. (Percentage of the population excluded from voting and extent of actual participation in elections should be left to Subsection 53, C.)

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 52. Structure of the Government

A. General

This Subsection should provide an appropriate approach to the treatment of material contained in the remainder of the Section and should be brief. It should take into consideration conditions, situations and practices which alter operation or organization of government as provided for in the constitution. It might also indicate the extent to which the framework for regional and local government differs from that established for the nation as a whole.

B. Central government

This Subsection is to describe briefly the legislative, executive, administrative and judicial organization and procedure, including a limited study of the major agencies of each. Structural organization, character of personnel, extent of popular control and procedures of operation should be included. Any significant demands for change on the part of influential groups should be pointed out. The material should be presented in such a way as to give the reader a clear conception of the effectiveness of the agencies and the actual locus of power in formation and administration of public policy.

C. Regional government

This Subsection deals with major political subdivisions, e.g., states in the U.S.

The necessity for Subsection 52, C, and the extent of coverage will vary from country to coun-

try. It may be essential to include some parts of B above in cases where an understanding of the nature of the regional governments is necessary to an understanding of the operation of the political systems as a whole. Where important, there also should be a discussion of the relation of the regional to the central and local governments (e.g., Canada and Australia).

D. Local government

The considerations applicable in Subsections B and C above are applicable here. Where important, the discussion should include an examination of the relation of the local to the regional (if any) and central governments.

E. Dependencies and associated states

This Subsection should include a classification of dependencies (colonies, trust territories, protectorates), their governmental organization and relation to the mother country, the extent of internal conflict and its international and domestic implications. The Subsection should also discuss the structure and internal relationships of associations of states (e.g., British Commonwealth of Nations, French Union, etc.) which have grown out of previous colonial relationships. Where a country has no dependencies, omission of this Subsection is appropriate and such lack of dependencies would then be mentioned in Subsection A.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 53. Political Dynamics**A. General**

This Subsection should provide an appropriate approach to the material contained in the remainder of the Section. It should be brief and should discuss the development and extent of political awareness among the people. It should also show the extent to which education and other factors prepare them for political responsibility, with appropriate cross reference to the Subsections on Education, Public Information, and Cultural Characteristics in CHAPTER IV. The locus of political power in the system of political dynamics and the extent to which political power is exercised within, or outside of, the constitutional system should be indicated. The Subsection might compare the system of political dynamics and its leadership with those of the United States or other appropriate countries.

B. Political parties

This Subsection should set forth the constitutional and legal provisions defining a party, regulating membership, governing collection and expenditure of money, and the control of campaigns. This should be compared with actual conditions and significant proposals for change. The major existing parties should be described—including economic, social, and religious interests represented, internal organization, avowed program, propaganda and propaganda methods, finances, and rank and file control. A brief account of the history of political parties should be included where necessary to explain trends in political alignments and objectives. There also should be a comparison of party strength. Quasi-political parties or groups having political influence to an extent greater than that normally attributed to pressure groups should be discussed here.

C. Electoral procedures

This Subsection should describe in detail the mechanics of important elections, evaluating them

as representative procedures. It should include the important constitutional and legal provisions governing the character of the ballot, guarantees of secrecy, accuracy of counting and a discussion of actual practices. It should also note any significant demands for change. With respect to the suffrage, groups excluded, percentage of population excluded, and the extent of actual participation should be discussed in detail.

D. Pressure groups

This Subsection should discuss briefly the constitutional and legal position with respect to lobbying, expenditure of money, participation in elections and relations to the parties. This should be followed by a description of the groups or organizations of *major importance* and should include their names, size, internal organization, character of membership, relation (if any) to foreign governments, influence in national and local affairs, and over-all ability to affect U.S. interests. It should not be restricted to pressure groups of Western type, but should include all major organizations endeavoring to influence government policies and activities other than through elections and through subversive activities.

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 54. Public Order and Safety

A. General

This Subsection should provide an appropriate approach to the material contained in the remainder of the Section. It should include a brief discussion of the conditions affecting the maintenance of public order and safety. The Subsection should indicate any significant aspects of the police and penal system as a whole, such as size, adequacy, extra-legal procedure, or importance as a political or economic force, which distinguish it from those of other areas.

B. Police system

A brief description should be given of the organization and operation of the police system including a discussion of the relation to other parts of the government, honesty and efficiency of personnel, attitude of the public toward it, and its general ability to preserve public order and safety.

C. Penal system

A brief description should be given of the organization and operation of the penal system in-

cluding its basic position in the legal system, relation to other parts of the government, honesty and efficiency of administration, and the public attitude toward it. This Subsection should include a discussion of the criminal codes and procedure, the incidence of crime, and the prison and reform system.

D. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 55. National Policies

A. General

This Subsection should provide an appropriate approach to the material presented in the remainder of the section. It should be used to discuss briefly the fundamental political, economic, and social factors necessary to understand national policies as a whole—e.g., their origins and the major factors conditioning their formulation and implementation. In individual instances, it may be necessary to emphasize the impact of history upon the development of national policies. This Subsection might also set forth the important interrelationships among domestic, foreign, and defense policies, especially as to cause and effect, disproportionate emphasis, and inconsistencies and conflicts. The popularity of national policies as a whole and their significance to the political system might be discussed. Detailed discussion of domestic, foreign, and defense policies should be left to the following subsections.

B. Domestic policies

This Subsection should provide a general statement on domestic policy as a whole and analyses of major issues and individual policies not discussed elsewhere in the NIS that are fundamental to the stability of government, or that strongly affect foreign and defense policies. Important domestic issues or policies treated in detail elsewhere in the NIS, especially in CHAPTERS IV and VI and in other sections of CHAPTER V, should be discussed briefly here with appropriate cross reference. Such discussions should emphasize long-standing and probably continuing trends, and should include a brief consideration of the characteristic political reactions of the people (mistrust of power, informal political forums, etc.), the implementation of policies, and the effects of domestic policies upon the political system. In individual instances, it might be advisable to show the extent to which the domestic policies are patterned after or integrated with those of another government.

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PAGE V-5

C. Foreign policies

This Subsection should present as *concisely* as possible the important relations of the country to individual countries and major power blocs, the extent of participation in international organizations and the extent of popular satisfaction with foreign policies and their conduct. The organization and powers of foreign policy-making components and their relations to other agencies of the government should supplement, as necessary, the treatment given in SECTION 52. The subsection should treat such factors as evidence of desire for rectification of borders, measures for exchange of population, measures for expulsion of ethnic groups, extent of adoption of immigration quotas, and efforts to extend control over foreign areas. A discussion of major treaties and agreements of a strategic nature, particularly those with the United States, should be included. There should be a brief discussion of the attitudes of the government and of the people toward foreign nations (particularly the United States and Americans) and international organizations (especially the United Nations or regional groupings for defense or other purposes), and toward foreign investments, with appropriate references to detailed discussions of attitudes in CHAPTER IV.

D. National defense policies

This Subsection should discuss the present defense policies of major political importance, including civil defense, and the influence of these policies upon domestic and foreign policies. It should describe the role of the defense establishment and of the armed forces in the government as far as it affects defense policies. Differences in viewpoint between the military establishment and the civilian policy-making bodies which are significant in the formulation of defense policies should include defense policies, including wartime morale and the influence upon defense policies of official and popular reactions toward war, rearmament and compulsory military training.

E. Comments on principal sources

This Subsection is to serve the following purposes:

- 1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.
- 2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 56. Intelligence and Security

A. General

This Subsection should include an over-all appreciation of the national intelligence system including the following: 1) legal status; 2) purpose; 3) relation to the executive, legislative, and judicial branches; 4) funds; 5) methods of operation; 6) key figures; 7) honesty and efficiency; 8) public attitude toward the system; and 9) a graphic portrayal of the general organization and functions of civilian and armed forces agencies and the interrelationship of these agencies.

B. Domestic intelligence

- 1) Agencies, with field of each
(This should include the pertinent information for Subsection 56, A above.)
- 2) Interrelationship of agencies and coordination of their efforts
- 3) Security

C. Foreign intelligence (as in Subsection 56, B above)**D. Comments on principal sources**

This Subsection is to serve the following purposes:

- 1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.
- 2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 57. Subversive

A. General

This Subsection should provide an appropriate approach to the material presented in the remainder of the Section. It should be used to discuss *briefly* the fundamental factors necessary to understand the material presented in the following subsections, including such points as 1) effects of the traditions, and attitudes of the people and of the recent conditions of the country upon subversive activity; 2) identification of subversive activity with political parties, labor organizations, or government agencies; and 3) legislation and governmental practices pertaining to subversive activity. If there are two or more categories of subversive activity this Subsection should also in general terms discuss the significance of subversive activity in the political system, and establish perspective and focus between the categories. Separate and detailed discussion of Communist and non-Communist subversive activity should be left to the following subsections.

B. Soviet and Communist subversive activities

This Subsection should include a discussion of Soviet and Communist espionage activities within the country, with emphasis on infiltration and penetration activities in labor, political, and cultural organizations.

Each active group or organization of importance should be presented with information as to name, size, character of membership, affiliated organizations, key figures, funds, aims, methods of operation, influence in national or local affairs, and ability to affect U.S. interests. If this has not been included in SECTION 53 a full scale study should be made of the history, covert and legal apparatus, and relationship to international organizations of the Communist parties.

C. Other subversive activities (same coverage as for Subsection 57, B above)

D. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 58. Propaganda

(Cross reference to appropriate sections, including Subsection 43, D)

Propaganda for political purposes may be considered as any form of information or ideas intended to influence the political behavior of people by affecting directly or indirectly their beliefs or attitudes concerning facts or values. This Section will indicate the extent and adequacy with which the propaganda facilities, at home and abroad, are utilized. It should contain a general discussion

of all types of political propaganda in terms of such variables as source of control, target, adequacy of coverage, degree of factuality, medium and form, means of dissemination, immediate and long range aims, and effectiveness. Emphasis should be placed on evaluation of effectiveness. Media and extent of coverage are to be discussed in detail in CHAPTER IV.

A. General

This Subsection should provide an appropriate approach to the treatment of the material contained in the remainder of the Section. It should indicate briefly the degree of susceptibility of the people being propagandized, considering such factors as rate of literacy and extent of cultural affinity with neighboring or other states, with appropriate reference to CHAPTER IV. It should endeavor to bring into perspective the categories of propaganda discussed in the following subsections.

B. Domestic propaganda

This Subsection should analyze the aims, policies, content, and effect of domestic political propaganda. It should explain the policies of the government regarding domestic propaganda and the aims of such propaganda. It should also explain the over-all organization and functioning of the domestic propaganda system. Charts and diagrams should be used whenever practicable. Government controls which as actually practiced are in conflict with constitutional and legal provisions should be discussed.

C. Propaganda directed abroad

This Subsection should analyze the aims, policies, content, and effect of political propaganda on foreign peoples. It should also explain the over-all

organization and functioning of the foreign directed propaganda system.

D. Propaganda by foreign countries

This Subsection should analyze the aims, policies, and content, and effect of political propaganda disseminated in the country by foreign countries. It should also explain briefly the organization and functioning of the foreign propaganda system aimed at the country.

E. Comments on principal sources

This Subsection is to serve the following purposes:

1. To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2. To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 59. Biographies of Key Personalities**A. General**

This Subsection should deal with key people who have or are likely to have a vital role in the political field. A preface should be inserted to provide perspective for the treatment accorded the political personalities in the Section by pointing out the principal factors in the basis for selection. When feasible the preface might also point out briefly the general characteristics of the group of selected personalities such as political affiliation, training, experience, education, religion, and social status. It should also give, where applicable, cross references to other sections of the NIS Area in which key figures are discussed. For example, to SECTION 53, which sometimes includes additional information

on political leaders; to SECTION 56, where heads of intelligence activities are discussed; to CHAPTER IV, SECTION 44, which may give data on key labor personalities; to CHAPTER IV, SECTION 43, which normally contains information on key figures in education, religion and public information, especially the press; to CHAPTER VII, which discusses important men in the scientific world; and to CHAPTER VIII, which contains biographies of key military figures. If the nation produces relatively few leaders because of small populations, form of government or some other reason, the biographical texts should be included in SECTION 53, and not submitted as a separate section.

B. Biographies

Biographic sketches should be restricted to a paragraph or two. Paragraph (textual) treatment will allow more scope for succinct evaluation than would be possible under the "Who's Who" type of treatment. The sketch should be introduced with a concise factual and/or evaluative statement of the individual's political role. Following this, the sketch should cover these items, normally in the order listed: 1) evaluation of character, influence and political potentialities, 2) personal data (date and place of birth, education), 3) career (principal positions held prior to present post, with dates), 4) characteristics of any significant publications, 5) languages, and 6) miscellaneous pertinent information which would help to reveal the character and attitude of the subject. The sequence of treatment may be varied in special cases where the

available data can be more appropriately handled in another way.

C. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER VI

ECONOMIC

Section 60 Introduction
Section 61 Agriculture and Food
Section 62 Fuels and Power
Section 63 Minerals and Metals
Section 64 Manufacturing and Construction
Section 65 Trade and Finance

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Chapter VI - Economic

OUTLINE

SECTION 60. INTRODUCTION

- A. Economic structure
- B. Economic dynamics
- C. Economic planning
- D. Strategic aspects of the economy

SECTION 61. AGRICULTURE AND FOOD

- A. General
- B. Agriculture
 - 1. Agricultural areas
 - 2. Production and supply
 - 3. Production practices, equipment and supplies
 - 4. Ownership, institutional and governmental factors
- C. Fisheries
 - 1. Catch of fish and other aquatic products
 - 2. Major fishing areas
 - 3. Fishing operations
 - 4. Utilization of catch
 - 5. Foreign trade in fishery products
 - 6. Ownership and control
 - 7. Government and industry policies
- D. Food balance sheet
- E. Forests and forest products
 - 1. The forest resource
 - 2. The primary forest products industries
 - 3. Supply position
 - 4. Forest policies and programs
- F. Comments on principal sources

SECTION 62. Fuels and Power

- A. General
- B. Solid fuels
- C. Petroleum
 - 1. General
 - 2. Strategic supply position
 - 3. Exploration and development
 - 4. Refining and processing
 - 5. Transportation
 - 6. Equipment and materials

- 7. Labor, finance, and government policy
- 8. Natural gas

D. Electric power

- 1. Role of electric power in the national economy
- 2. Growth of electric power production and capacity
- 3. Generating plant
- 4. Sources of energy
- 5. Transmission system
- 6. The coordinated or interconnected systems
- 7. Consumption of electric energy
- 8. Organization of the electric power industry
- 9. Future developments

E. Comments on principal sources

SECTION 63. MINERALS AND METALS

- A. General
- B. Iron ore
- C. Iron, steel, and mill products
- D. Nonferrous ores, metals, and alloys
- E. Nonmetallic minerals
- F. Construction materials
- G. Comments on principal sources

SECTION 64. MANUFACTURING AND CONSTRUCTION

- A. General
- B. Industrial machinery and equipment
- C. Motor vehicles (including tanks, self-propelled guns, etc.)
- D. Aircraft production
- E. Shipbuilding
 - 1. General summary
 - 2. Major yards
 - 3. Minor yards
- F. Explosives, industrial and military
- G. Guns, explosive devices, and ammunition

~~CONFIDENTIAL~~
PAGE VI-1

- H. Other military equipment and supplies (including war gases and smoke preparations)
- I. Telecommunications signal and lighting equipment
- J. Chemical industries
 - 1. Industrial chemicals
 - 2. Chemical fertilizers
- K. Agricultural processing industries
- L. Fibers, fabrics and rubber
- M. Construction industries
- N. Other industries
- O. Comments on principal sources

- C. Domestic trade and finance
 - 1. Pattern of domestic trade
 - 2. Domestic financial institutions and their structure
 - 3. Government finance and fiscal policy
- D. International finance and trade
 - 1. Balance of payments position
 - 2. Foreign assets and liabilities
 - 3. Government policies, practices and institutions relative to international trade and finance
 - 4. Foreign trade organizations
- E. Government wartime financing
- F. Comments on principal sources

SECTION 65. TRADE AND FINANCE

- A. General
- B. Business organization

JUNE 1951

ECONOMIC

~~CONFIDENTIAL~~

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

It is essential that analysts and editors be thoroughly familiar with *all* of the following explanatory material, even though they are concerned with only a portion of the outline of the Chapter. Analysts should keep in mind that the outline is meant to serve as a *guide* and not as a hard and fast statute of requirements for every study. It should be used flexibly, adapted to suit the particular economic circumstances of each area, and the analysis should elicit those economic features and developments which are important to that area.

1) *Purpose*: The purpose of CHAPTER VI is to provide a *concise* but complete survey of the economic structure, potential, and importance of the area. The various sections of the Chapter will provide, in the aggregate, an integrated view of the economy, the pattern and direction of its development and the capacity of the economy to adjust itself to change.

2) *Treatment*: SECTION 60, which is designed to give an over-all evaluation of the economy, is to be treated in the special manner described under SECTION 60 below. The other sections deal with basic materials, energy resources, industries, trade and finance, and such related subjects as are essential to an evaluation of the economy of the area and of the manner in which it functions.

Each section should include all the factual data needed to support the analysis. Such data should be set forth, so far as possible, in statistical tables, on charts and maps, and in tabulations. Text should be used for the purpose of singling out the more significant aspects of the statistical and graphic material and of assembling data that do not readily lend themselves to tabular and graphic presentation, or where scantiness of data would make tabular treatment more bulky.

The general or "A" portions of each section should indicate the significant aspects of the subject under discussion and consider them as they would affect the nation's strength as an enemy, neutral, or ally. Special emphasis should be given to such problems as self-sufficiency, capacity to expand production and supplies, and direction and rate of economic development.

3) *Tabular presentation*: It is intended in the near future to provide specific table forms for certain items and countries in order to insure the required detail in important areas and uniformity of treatment among countries.

It is especially important that full footnotes be carried in file copies of the final draft, indicating source of data plus any other notes necessary for full understanding of any qualifications of the data. This is important for the implementation of the maintenance program and for further research. For the copies to be submitted to CIA only the principal references and explanatory notes should be carried.

4) *Visual presentation*: Maps, charts, graphs, and photographs should be provided wherever they will serve in lieu of text, or to summarize or clarify textual and statistical matter. Appropriate reference regarding such visual aids should always appear in the text.

5) *Use pattern*: Major uses of items should be shown quantitatively. This information should be given for all consumption including those items that are imported. In the case of items that are used for one purpose which is self evident, the requirement for this information does not of course apply.

6) *Units of measure and value*: See *NIS Editorial Instructions* (E, 5, Statistical data) for detailed rules.

7) *Years to be reported*: Annual statistical data (by calendar, crop, or fiscal years) will be reported in accordance with the practice in the area. For the most recent data, however, if not annual, reporting should be in the largest available fraction of a year. As a general rule, figures for several prewar years or an average of prewar years will suffice to reflect the prewar situation for comparative purposes. If data are taken from two or more sources, care must be exercised to assure comparability; if data are not comparable, appropriate footnotes explaining the noncomparability will be included.

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PAGE VI-3

Section 60. Introduction

The purpose of this Section is twofold. Firstly, it is designed to give an integral view of the structure of the economy, the pattern and direction of its development, and the capacity of the economy to adjust itself to external or internal political or economic changes. Secondly, it is to serve as a frame of reference for proper evaluation of the material, both factual and interpretive, presented in the subsequent sections of the chapter.

Detailed accounts of the component parts of the economy are to be presented in the respective sections of this and other chapters and supplements. Here, the task is to define the significant aspects of each sector of the economy, to assess the part it plays in the total economic structure of the area, and to examine the factors which condition the scope and direction of the economic process. It should present the over-all production or other figures needed to indicate the position of any vital industries (such as steel), both in the structure of the economy of the area and in relation to world production.

A. Economic structure

This Subsection should be given over to a statement in broad terms of the main structural features of the economy. It should examine the position and importance of the various sectors of economic activity both in terms of their contribution to national income and in relation to the country's resources and to their potential development.

It should also discuss types and rate of domestic capital accumulation, recent pattern of utilization, and factors stimulating or limiting capital formation such as private or government investment policies, domestic and foreign markets, foreign investments, etc. The discussion should, moreover, analyze the nature of the economic development in terms of changes in the composition of the gross national product.

B. Economic dynamics

This Subsection should be devoted to a definition and analysis of the forces which at present determine the orientation of the economy. The discussion should examine the technological advance of economic processes as it affects the various sectors of the economy. It should ascertain the competitive strength of the economy in terms of productivity of labor, degree of mechanization, etc., and appraise the ability of the economy to make appropriate adjustments to change, includ-

ing changing patterns of world trade. It should also examine the role of the state in controlling and influencing economic organization, activity, and development and should evaluate the significance of entrepreneurial activities of the state.

C. Economic planning

Describe briefly the orientation of current national policy and indicate the areas of economic activity to which it applies, the scope and orientation of long-range economic planning, and examine critically the degree of disparity between plans and economic capabilities of the area. Indicate how the government proposed to finance the realization of its long-range economic plans, and examine the extent to which such plans are being realized. Discuss the nature and amount of assistance, if any, from abroad (e.g., ECA, Eximbank, Morrison Knudson, etc.) in furthering plans.

D. Strategic aspects of the economy

In this Subsection discussion should cover the problem of the strategic supply position and economic war potential. Here must be examined the extent to which the country is or can readily become self-sufficient in its major requirements and what conditions must be fulfilled in order to increase the degree of self-sufficiency of the area. The problems of self-sufficiency and economic capacity for war should be considered not only with respect to available natural resources but also in relation to existing man-power and its technical capabilities, and in relation to available installations affecting production. With respect to man-power, consideration should be given to conclusions reached in CHAPTER IV on problems of mobility, existing skills, adaptability of labor to new productive processes, feasibility of increasing the labor force through mobilization of over-age and under-age laborers and women. With respect to the existing productive plant, attention should be given to the degree of utilization of existing facilities. The analysis should indicate the causes of significant deficiencies or surpluses. It should also indicate the degree to which the economy is vulnerable to military attack, in terms of dependence on a particular sector of the economy or a particular group of installations. In this connection it would be appropriate to consider conclusions reached in CHAPTER III with respect to the transportation system and the manner in which it affects the economic war potential of the area.

Section 61. Agriculture and Food

A. General

Give a concise appraisal of the agricultural sector of the economy. Define the position of agriculture, including primary processing, in terms of its contribution to national income, as a field of capital investment and source of employment. Discuss briefly recent developments or major trends in land ownership and land use with particular reference to production patterns and techniques.

Indicate the degree of the country's self-sufficiency in food, feed, and industrial crops. Discuss briefly the country's position as a market for and an international supplier of agricultural commodities, including processed products.

Summarize current governmental policies with respect to ownership and utilization of land, agricultural production, and prices, as well as in relation to international controls and agreements that bear upon production, international prices, and allocation of markets.

Indicate the relative importance of the fishing industry in the national economy. Briefly describe the organization of the industry and the manner in which it is protected and regulated by the government.

Discuss in broad terms the position of the forest industry in the national economy, with an indication of the extent and distribution of forest resources. Summarize recent developments in the exploitation of resources and government policies relating to the conservation and national utilization of forest resources and to primary processing activity. Discuss the country's dependence upon foreign markets and sources of supply.

B. Agriculture

(For topographical details see Section 24)

1. AGRICULTURAL AREAS

Indicate the suitability of the country in terms of soil fertility, climate and rainfall for agricultural production. State the approximate amount and percentage of the land area that is arable and compare with that actually under cultivation. Discuss the uses of arable land and indicate the extent to which it can be increased by clearing, irrigating, draining and terracing. Give an overall statement in regard to land ownership and average size of farms.

2. PRODUCTION AND SUPPLY

a. MAJOR CROPS

- (1) *Food crops*
- (2) *Feed crops*
- (3) *Industrial crops*

Discuss for each of the important food, feed and industrial crops, planting and harvesting dates, area under cultivation, and geographical location, total output, yields, imports and/or exports, domestic consumption and their relative importance in the agricultural economy. Indicate the manner in which crops move within the country from land or storage facilities to processing centers and consumption areas, or to export ports. (Give location of storage facilities and processing plants.) Grain elevators and rice mills will be discussed in detail here; cross references to Subsection 64, K should be carried for all other agricultural processing industries.

As much of the data as possible should be presented in tabular form or on maps.

b. LIVESTOCK

- (1) *Numbers*
- (2) *Products*
- (3) *Animal diseases and parasites*

Indicate the geographical location and distribution of grazing areas. Discuss the scale of individual enterprises and production methods.

Examine movement of livestock to processing plants and to consumption markets and export ports. Consider production techniques in processing plants and cross reference to Subsection 64, K. Discuss the country's surplus and deficit position and probable future trends. Use tables, charts and maps wherever possible.

3. PRODUCTION PRACTICES, EQUIPMENT AND SUPPLIES

a. FARM MACHINERY

b. CHEMICAL FERTILIZERS

c. SEED

d. INSECTICIDES AND FUNGICIDES

Discuss production practices and techniques with reference to crop rotation, plant diseases and parasites, the use of seed, farm machinery and chemical fertilizers. As feasible, include quantitative data on principal farm machinery, such as tractors, combines, etc. Discuss the degree of self-sufficiency and foreign trade in regard to the four subjects. Indicate the relationship of yields to use of improved seed, farm machinery and fertilizers.

Discuss the extent to which additional use of improved seed and fertilizers for the purpose of increasing yields is feasible or practicable. Where appropriate, cross-reference to data in Subsection 64, B (industrial machinery), Subsection 64, C (motor vehicles) and Subsection 64, J (chemical fertilizers).

4. OWNERSHIP, INSTITUTIONAL AND GOVERNMENTAL FACTORS

- a. LAND OWNERSHIP AND TENURE
- b. FARM ORGANIZATIONS
- c. GOVERNMENT POLICIES

Discuss such factors relating to agriculture as land ownership, tenancy, associations, government policies relating to protection and subsidies, price and production controls and guarantees, credit and other assistance to producers, and plans for the future.

C. Fisheries

Whaling to be included throughout this Subsection, wherever it is of importance.

1. CATCH OF FISH AND OTHER AQUATIC PRODUCTS

Discuss total annual production with tabulated data. Discuss seasons of abundance, trends in production and reasons for changes.

2. MAJOR FISHING AREAS

Discuss significant aspects, such as accessibility, and include appropriate map material.

3. FISHING OPERATIONS

a. METHODS — Types of gear used; advances in introduction of new techniques; brief reference to availability of materials for manufacturing netting, rope, and other equipment, and plant facilities for manufacturing gear and other fishing equipment.

b. FISHING VESSELS — Types and numbers of motorized and nonmotorized fishing craft; condition of fishing fleet; programs for modernization of fleet; productive capacity of fleet.

c. PERSONNEL — Number employed full and part-time.

4. UTILIZATION OF CATCH

a. DISTRIBUTION OF CATCH — Domestic consumption, amounts marketed fresh, frozen, canned, salted, dried, smoked, etc.; methods of distribution with brief mention of availability of refrigeration and ice-making facilities.

b. PROCESSING — Types of processed products; location and number of processing installations; productive capacity of installations; employment; availability of processing material (cans, salt, etc.).

c. MANUFACTURE OF BY-PRODUCTS — Type of by-products; location and number of plants; productive capacity of plants; employment. Cross reference to Subsection 64, K and avoid duplication.

5. FOREIGN TRADE IN FISHERY PRODUCTS

6. OWNERSHIP AND CONTROL

Brief description of concentration or spread of ownership including ownership of vessels as well as ownership or control of related industries and services such as transport, refrigeration and canning.

7. GOVERNMENT AND INDUSTRY POLICIES

Current regulations for fisheries; international agreements; programs for expansion; industry organization, if any, with its policies and program.

D. Food balance sheet

Discuss briefly the food consumption habits of the population. Set up a food balance sheet for the area. This Subsection should be a summarization of the data on production, trade in, and quantities available for consumption, of all significant food products. It should present, in so far as possible, a concise picture of the type of products consumed, the proportion supplied from domestic sources, the dependence upon outside sources, and the surplus supplies of food products normally available for export.

E. Forests and forest products

1. THE FOREST RESOURCE

Describe the extent and nature of productive forest resources: 1) area in relation to total forest area and to total land area, 2) productive potential in relation to annual production and requirements.

Give geographic distribution of productive forests, their condition and accessibility—by major types. Indicate the volume of standing timber and examine volume distribution in relation to economic exploitation.

Describe the pattern of forest ownership and discuss relation of class of ownership to forest condition.

Indicate the annual growth and drain of accessible commercial forests.

2. THE PRIMARY FOREST PRODUCTS INDUSTRIES

Discuss development of the industry in relation to distribution and character of forest resources.

Describe briefly the more important primary products industries, including lumber, plywood, and veneers, giving location production, productive capacity, raw materials used, production techniques, supply of labor, financial organization.

JUNE 1951

ECONOMIC~~CONFIDENTIAL~~**3. SUPPLY POSITION**

Discuss trends in domestic consumption of major primary forest products.

Examine patterns of foreign trade in primary forest products, with special emphasis upon products of strategic importance.

4. FOREST POLICIES AND PROGRAMS

Describe the more important laws and regulations which affect forestry and the organization and operations of the forest industry. Discuss government policies relating to foreign trade in forest products.

Examine current public and private forestry programs.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 62. Fuels and Power**A. General**

Discuss the position of the fuels and power industry in the national economy.

Discuss the supply and use patterns of various forms of energy, including the conversion of coal to coke and related products, manufactured gas, and petroleum substitutes. Comment upon the interchangeability of fuels in terms of the area's requirements and economic activities. Indicate the country's dependence upon foreign sources of supply. Relate the country's domestic resources and their development to future requirements.

Include in this Section: 1) a table showing in calories equivalents consumption of primary fuels (coal, oil, natural gas, hydroelectric power); 2) a table showing in calories equivalents consumption of all fuels by major consumer classes.

B. Solid fuels

The following outline insofar as applicable is to be used for each of the fuels to be discussed. The principal categories of fuels should be treated separately: Coal and lignite; peat; fuelwood and charcoal. Discussion of coal is to include the broad aspects of conversion of coal to coke and related products, manufactured gas, and petroleum substitutes; this discussion is not to approach the depth of detail and technical aspects contained in the subsections on petroleum, iron and steel, explosives, chemicals, and rubber. Appropriate cross reference should be made to these subsections.

Discuss production and consumption trends, and domestic use pattern.

Analyze the competitive position of the industry in the world market and conditions affecting foreign trade and indicate the country's dependence upon foreign sources of supply.

Describe in general terms the nature, extent and location of deposits and indicate factors affecting exploitation, such as accessibility, capital requirements, and manpower.

Discuss government policies with respect to development of reserves, exploitation of available deposits, utilization of foreign capital, and foreign competition.

Discuss production in the more important individual mines. Indicate factors affecting operation of the mines, such as degree of mechanization, manpower, transportation, availability of fuel, by-product operations, etc.

Present in tabular form: 1) location of mines, grade and extent of deposits, type of operation, production capacity, manpower, ownership, remarks on extent of mechanization; 2) annual production by regions and/or mines; 3) annual consumption by consumer; 4) imports and exports by countries; 5) stocks.

C. Petroleum

Throughout this Subsection, cross reference to sections of SUPPLEMENT V wherever appropriate.

PAGE VI-7

1. GENERAL

a. SUMMARY — Over-all petroleum supply and demand situation

Analysis of principal aspects of the industry including development pattern and reserve position

b. STRATEGIC SIGNIFICANCE — Asset or liability position petroleum-wise to the United States

c. INTERNATIONAL SIGNIFICANCE — Importance as a world source of, or world market for, crude and refined petroleum products

Influence of the world petroleum situation, in both strategic and economic terms, on the area's petroleum activity and development

d. DOMESTIC SIGNIFICANCE — Degree of self-sufficiency or import dependence for crude and petroleum products, as well as technical personnel, equipment, and supplies for the petroleum industry

Importance of the industry to the over-all domestic economy

Importance of the industry as a source of government revenue and foreign exchange

Domestic requirements demand on foreign exchange assets

e. GEOGRAPHIC AND TRANSPORTATION ASPECTS — Indicate the geographic dispersion of producing areas, refineries, consuming centers, export and import ports, as well as transportation pattern and facilities, and discuss their general effect on petroleum industry development.

f. GENERAL VULNERABILITY OF PETROLEUM INDUSTRY INSTALLATIONS

- Producing fields
- Refineries and processing plants
- Pipelines
- Storage
- Terminals and docks

g. EXPANSION OR CONTRACTION — Discuss any probable expansion or contraction of exploration, production, processing and consumption, including the effect of labor-management relationships, with respect to crude petroleum, natural gas, natural gas liquids, and substitute liquid fuels.

2. STRATEGIC SUPPLY POSITION

Crude petroleum and liquid hydrocarbon substitutes—production for 1938, 1946, 1947, 1948, and 1949. Discuss trends.

Refined products—production for 1938, 1946, 1947, 1948, and 1949. Discuss trends.

Imports of crude oil and refined products for latest year available, showing principal products and countries of origin. Discuss trends. Indicate

briefly manner and extent trade is affected by foreign exchange, tariffs, quotas, and other trade restrictions.

Exports of crude oil and refined products for the latest year available, showing principal products and country of destination. Discuss trends. Indicate briefly the manner and extent trade is affected by foreign exchange, tariffs, quotas, and other trade restrictions.

Consumption of refined products for the latest year available, showing principal refined products and major consumer interests. Discuss trends. Also discuss adequacy of supply and indicate, if deficiencies exist, the probable effect on industrial expansion and the conduct of military operations.

3. EXPLORATION AND DEVELOPMENT

Discuss the significant historical and technological aspects, as well as present pattern, of exploration and development, giving a succinct appreciation of the country's petroliferous character. State the amount of reserves, indicating their relative importance to world reserves. Indicate the proved reserves by main fields. With respect to concessions, summarize the development to date, indicating areas, concessionaires, and terms of important concessions.

4. REFINING AND PROCESSING

Brief historical background, including war damage and restoration. General pattern and present relative significance of crude oil refining, natural gas liquids processing, and synthetic liquid fuels manufacture. Present in tabular form names, location, type, capacity, ownership, and operators of existing and proposed refineries. Relative adequacy to meet peacetime domestic requirements. Succinct discussion of future plans and factors affecting them. Potential importance in event of a wartime emergency.

5. TRANSPORTATION

General appreciation of over-all petroleum transport, storage, and terminal facilities, including extent, purpose, capacities, relationship to adjacent countries, and other geographic considerations, as well as to other means of transport and relative adequacy for peacetime requirements. Describe the principal pipelines, indicating the location, length, size, capacity, and date of construction. A short account of significant historical and geographical aspects, including war damage and restoration, and a brief discussion of probable development. Where pertinent, comparisons to United States facilities should be made for general orientation and appreciation.

JUNE 1951

ECONOMIC

~~CONFIDENTIAL~~**6. EQUIPMENT AND MATERIALS**

Summarize the domestic capabilities for the manufacture of equipment and supplies required by the petroleum industry for exploration, production, refining and processing, and distribution, indicating the degree of self-sufficiency. Where deficiencies exist, indicate source of import.

7. LABOR, FINANCE, AND GOVERNMENT POLICY

Indicate the availability, relative importance, efficiency, political complexion, and political influence of the petroleum labor force.

Examine the extent of capital investment in, or control over, the various components of the industry, by nationality and ownership, indicating over-all relationship of foreign to local capital investment. Describe the organizational pattern and external control exercised over foreign oil companies. Evaluate briefly the nature and extent of the domestic capital market for petroleum industry investment. Discuss factors affecting foreign capital investment in the industry, such as the relationship of risk to return and the limitations placed on the transfer abroad of capital and earnings.

Discuss, analyze, and evaluate government policy and basic or pertinent laws relating to the petroleum industry, indicating particularly their relative influence on the operations of foreign oil companies. Indicate and evaluate the degree of control over oil industry operations exercised by government organizations.

8. NATURAL GAS

Discuss the relative importance of the natural gas industry to the economy of the country, indicating reserves, production, and describing briefly the distribution system. Discuss the extent of use for industry, space heating and light, repressuring of oil fields, for the production of natural gas liquids, as well as the amount flared.

D. Electric power**1. ROLE OF ELECTRIC POWER IN THE NATIONAL ECONOMY**

Discuss extent to which population and industry are served with electricity, for example, percentage to total of households having electricity, of population living in electrically lighted homes, of farms electrified, and percentage of electric

power employed in industry related to total motive power employed in industry.

Discuss share of electric power industry in the national income, number of employees in the electric power industry, and share of total capital assets employed in the electric power industry.

2. GROWTH OF ELECTRIC POWER PRODUCTION AND CAPACITY

Present and discuss summary data showing growth of electric power production and capacity related to population; distribution of electric power capacity and production, by type of generation, for the country as a whole; and distribution of electric power capacity and production by major regions or systems.

3. GENERATING PLANT

Present and discuss summary data showing extent to which plant capacity and production may be concentrated in a small number of large plants or distributed among a large number of small plants.

Describe major or special hydroelectric plants or developments. Where water power constitutes an important source of energy for the production of electric power, either potential or developed, discuss extent to which these resources have been developed. If possible, develop summary information of the following type:

Location of undeveloped water power:

REGION	NUMBER OF SITES	ESTIMATED AVERAGE ANNUAL OUTPUT	ESTIMATED INSTALLED CAPACITY

Discuss accessibility of these resources to load centers.

Give specific references to important studies which have been made pertaining to power development of the country's water resources.

Describe major thermal plants. Discuss extent to which location may be influenced by supply of fuel, availability of cooling water, consumption centers, defense considerations.

Tabulate significant generating station statistics.

4. SOURCES OF ENERGY

Discuss relative importance of various sources of energy in the production of electric power and

~~CONFIDENTIAL~~

PAGE VI-9

extent to which average annual fuel rates per kwh production reflect increases in efficiency of steam generation or lack of modernization.

Discuss source of fuel, whether imported or indigenous, and, if imported, availability of foreign exchange for purchase of fuel.

5. TRANSMISSION SYSTEM

Describe important transmission networks. Discuss extent to which system serves to transfer power from fuel and hydro sources to load centers; to interconnect isolated communities and large population or industrial centers; to provide emergency supply for normal facilities out of service; to reduce reserve requirements; or to eliminate inefficient plants.

Discuss principal connections with other countries and present summary data showing transfer of power across international boundaries related to total production or consumption.

6. THE COORDINATED OR INTERCONNECTED SYSTEMS

Describe present organization, arrangements, or agreements for integrating interconnected facilities.

7. CONSUMPTION OF ELECTRIC ENERGY

Discuss the utilization of electric energy within the area and tabulate electric energy consumption by class of use, by number of customers, if available, and by percent of total consumption and of annual kwh consumption by each class. Analyze the relationships disclosed in these computations.

Discuss present limitations in the use of electricity.

8. ORGANIZATION OF THE ELECTRIC POWER INDUSTRY

Present and discuss summary data showing distribution of electric power production and capacity by class of ownership such as industrials, private utility corporations, state-owned monopolies, distribution cooperatives, etc.

Discuss extent to which industry is government-owned, regulated, or operated.

Discuss extent to which production, transmission, and distribution facilities are unified, or extent to which production, transmission, and dis-

tribution facilities are separately owned or operated.

Describe any central organizations that may exist for planning and developing a national power policy or program.

Discuss extent to which foreign capital may be employed in this industry and its effect upon the industry's operating policies and practices.

9. FUTURE DEVELOPMENTS

Describe important programs for the expansion of electric power and show the effect of these programs upon present capacity and production.

Describe any factors which may encourage or limit the future of this industry such as unsatisfied demand, shortage of capital, lack of resources, legislation, etc.

Attach a system map showing geographic location of generating stations. In addition, show principal transmission lines and substations by which these plants are interconnected and by which energy is transmitted to areas of consumption. Show construction planned or in progress, as well as present capacity.

Statistical and operating data are to be shown in the form prescribed in the example tables for FIGURES 62-1 through 62-9 on the following pages. Where information is not available according to the required standards, submit the best information available with explanation of deviations from these standards. Data in tables, FIGURES 62-7 through 62-9, are to be furnished for the most recent period. Data in tables, FIGURES 62-1 through 62-6 are to be furnished for several years so that long-time trend analyses may be developed.

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

JUNE 1951

ECONOMIC

~~CONFIDENTIAL~~

(EXAMPLES)

FIGURE 62-1. INSTALLED CAPACITY OF GENERATING PLANTS AND PRODUCTION
(By type of prime mover)

TYPE OF PRIME MOVER	UTILITIES		
	Privately owned	Publicly owned	Industrials
Hydro:			
No. of plants			
Capacity (kw)			
Production (kwh)			
Steam:			
No. of plants			
Capacity (kw)			
Production (kwh)			
Internal combustion:			
No. of plants			
Capacity (kw)			
Production (kwh)			

FIGURE 62-2. ELECTRIC POWER PRODUCTION AND CAPACITY
(By major regions and systems)

REGION OR SYSTEM	CAPACITY	PRODUCTION
	<i>kw</i>	<i>kwh</i>

FIGURE 62-3. ELECTRIC UTILITY CONSUMPTION OF MAJOR FUELS

TYPE OF FUEL	PRODUCTION	CONSUMPTION
	<i>kwh</i>	<i>tons</i>

FIGURE 62-4. ENERGY TRANSFERRED ACROSS INTERNATIONAL BOUNDARIES
(List receipts and deliveries separately)

ITEM NO.	TRANSFERRED FROM		TRANSFERRED TO		POINT OF TRANSFER	ANNUAL KWII TRANSFERRED
	Company or agency (a)	Country (b)	Company or agency (c)	Country (d)		

FIGURE 62-5. ELECTRIC POWER CONSUMPTION

CLASS OF USE (SUCH AS RESIDENTIAL, COMMERCIAL, INDUS- TRIAL, ETC.)	NO. OF CUS- TOMERS (IF READILY AVAILABLE)	% OF TOTAL CONSUMP- TION	ANNUAL CONSUMP- TION
			<i>kwh</i>

FIGURE 62-6. ELECTRIC ENERGY USED IN INDUSTRIAL OPERATION
(In kilowatts)

MAJOR CLASS OF INDUSTRY	GENERATED	PURCHASED	CONSUMED
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FIGURE 62-7. GENERATING STATION STATISTICS—FOR PLANTS OF ... KILOWATTS OR OVER (OPERATING, UNDER CONSTRUCTION, OR PLANNED AS OF ...)

(List plants under subheadings for industrial or public utility; privately or publicly owned; steam, hydro, or internal combustion.)

NAME OF PLANT	
ITEM NO.	.....
1	Name of operator*
2	Location of plant
3	Map reference number
4	Type
5	Condition of plant
6	Capacity—installed and net plant capability in kw (maximum capacity, excluding station use, available at time of peak)
7	Annual kwh production
8	Generator voltage, phase and frequency
9	Consumers

* If the operator is not the same as the owner, or if control is held in another corporation, submit explanation.

FIGURE 62-8. SIGNIFICANT TRANSMISSION LINE STATISTICS

	IN SERVICE	CHANGES UNDER WAY OR PLANNED
Name of operator or owner		
Line designation		
From		
To		
Voltage		
Operating		
Designed		
Pole length of line		
Number of circuits		
Type of construction		
Nature of change		
Date of change		
Start		
Completion		

FIGURE 62-9. SIGNIFICANT SUBSTATION STATISTICS

	IN SERVICE	CHANGES UNDER WAY OR PLANNED
Name of operator and owner		
Name and location of substation		
Character of substation		
Voltage		
Capacity		
No. of transformers		
Nature of change		
Date of change		
Start		
Completion		

Section 63. Minerals and Metals

A. General

Discuss briefly the position of the area's mineral and metal industries in the national and world economies. Analyze the relative importance of the industry in terms of its contribution to the national income, as an employer of labor, and as an investment area.

Discuss the size of the industry in terms of the country's requirement and in relation to foreign demand for the industry's output.

Indicate the salient characteristics of the industry such as: extent of reserves, locational and transportation factors; dependence upon foreign sources for supplies and equipment; productive potential; degree of integration of the industry; technological aspects of production; ownership; international agreements; government policies.

B. Iron ore

Discuss production and consumption trends, and domestic use pattern.

Analyze the competitive position of the industry in the world market and conditions affecting foreign trade, and indicate the country's dependence upon foreign sources of supply.

Describe in general terms the nature, extent, and location of deposits, and indicate factors affecting exploitation, such as accessibility, capital requirements, and manpower.

Discuss government policies with respect to development of reserves, exploitation of available deposits, utilization of foreign capital, and foreign competition.

Discuss production in the more important individual mines. Indicate factors affecting operation of the mines, such as degree of mechanization, manpower, transportation, availability of fuel, by-products, etc.

Tables, maps, and graphics: Give in tables and, where practicable, in graphic form, the following: 1) location of mines, grade and extent of deposits, type of operation, production capacity, manpower, ownership, remarks on extent of mechanization; 2) annual production by regions, fields and/or mines; 3) imports and exports by countries; 4) stocks.

C. Iron, steel, and mill products

This Subsection should include primary processing, which is defined as including production of the following: pig-iron, ingots, castings, finished hot-rolled products (plates, sheets and strip, strip and sheet for cold reduced black plate and tin plate, hoops and cotton ties and baling bands, bars, structural shapes, rails, splice bars and tie plate bars, skelp, blanks or pierced billets, wire rods, rolled forging billets, blooms and billets for export, car wheels); further finished steel mill products (cold finished and tool steel bars, cold rolled sheets and

JUNE 1951

ECONOMIC

~~CONFIDENTIAL~~

strip, tin and terne plate, galvanized terne sheets, finished black slate, tie plates, wire, woven wire fence, bale ties, fence posts, nails and staples, pipe and tubes).

Discuss briefly productive capacity of the industry and indicate current output, including data on limestone and metallurgical coke (with cross-reference to Subsection 62, B). Examine current production pattern. Discuss the ability of the industry to meet domestic requirements for particular steel products and the extent of imports. Examine competitive position of industry, government policies affecting operation of industry, efficiency of operations, etc.

Discuss factors affecting production of the industry as a whole and of major individual plants such as degree of mechanization and efficiency of operations with respect to supply of raw materials, (including ferro-alloys) fuel, transportation, manpower, markets, etc.

List in tabular form individual plants giving name, location, productive capacity, number and type of furnaces, number and type of finishing installations, output by products, operating and beneficial ownership.

List in tabular form annual production, consumption including use pattern, imports and exports by countries and principal types of products.

List in tabular form annual consumption and source of major raw materials: iron ore, ferro-alloys, scrap, fluxes, and fuels.

D. Nonferrous ores, metals, and alloys

Textual analysis and discussion should be by Subsections similar to those indicated above for Subsection B, Iron Ore. Only those ores, metals and alloys of economic importance should be treated. A checklist is provided below. This Subsection should include the processes through smelting, refining, and forming metal into basic shapes.

In treating the processing industries, data should also be given on annual consumption and use pattern, including scrap.

Data for ores should be given in terms of specified content or of the metal content of the ore, in accordance with U.S. Bureau of Mines practice in the "World Review" section of the *Minerals Yearbook*.

The following list will serve as a guide for selecting the products of importance in the area. Others not on the list should be treated if their importance warrants.

METALS AND ORES		ALLOYS
Aluminum and bauxite	Beryllium	Brass
Copper	Bismuth	Bronze
Lead	Boron	Bearing metal
Magnesium	Cadmium	Monel metal
Nickel	Chromium	Nichrome
Tin	Cobalt	Nickel silver
Zinc	Columbium	Stellite
Gold	Lithium	Solder
	Manganese	
Platinum and allied metals (iridium, osmium, palladium, rhodium, ruthenium)	Mercury	
	Molybdenum	
	Selenium	
	Sodium	
	Tantalum	
Silver	Tellurium	
Radium	Thorium	
Thorium (Monazite)	Titanium	
Uranium	Tungsten	
Alunite	Vanadium	
Antimony	Zirconium	
Arsenic		

E. Nonmetallic minerals

Textual analysis and discussion should be by Subsections similar to those indicated above for Subsection B, Iron Ore. Only those materials of economic importance should be treated. A checklist is provided below. Except for fertilizer minerals, which are covered in Subsection 64, J, this Subsection should include primary processing as well as mining.

In treating the processing facilities, data should also be given on annual consumption, including use pattern.

The following list will serve as a guide for selecting the products of importance in the area. Others should be treated if their importance warrants.

Asbestos	Diamonds	Nitrates
Barite	Feldspar	Phosphate rock
	Fluospa	Potash
Bentonite	Graphite	Pyrite
Calcite		Quartz crystals
Celestite	Helium	
	Iodine	Salt
Chalk	Kyanite	
Clays		Sapphire and ruby
	Limestone	
Corundum, emery, and artificial abrasives	Magnesite	Sulphur
	Mica	
Cryolite		Talc

PAGE VI-13

F. Construction materials

Discuss the position of the country's basic products which comprise the major materials used in construction, exclusive of lumber, plywood, structural iron and steel, asphalt and glass, which are treated in detail in other sections of CHAPTER VI. This Subsection should be devoted mainly to cement and other construction materials such as sand, aggregate, glass sand, building stone, brick, cement, lime, gypsum and roofing materials.

Examine the importance in the economy of the industry producing these materials and indicate its capacity to meet domestic requirements. Examine the size of the industry in terms of production, capital investment and in relation to markets. Discuss production trends including technological advances. Indicate problems confronting the industry with respect to raw materials, location, domestic and foreign competition, and government policies and contracts. (Tables: Production and consumption including use patterns where possible, imports and exports by countries of origin and destination, stocks, etc.)

List in table name, location, output, capacity, equipment, number of employees, ownership of major individual plants. Indicate factors affecting production of individual plants such as efficiency of operation, availability of fuels, adequacy of transportation, efficiency of labor, plans for expansion, ability to meet foreign competition, etc.

G. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 64. Manufacturing and Construction**A. General**

Review the salient features of the country's manufacturing and construction industry. Review the salient features of the country's manufacturing and construction industry, including ownership, degree of integration, government policies, and international agreements. Discuss the position of the industry within the country as an employer of manpower, a sector for investment and a contributor to national income. Indicate the degree of dependence of the industry on foreign sources for raw materials and equipment, components, and finished products. Discuss the competitive position of the industry in domestic and in foreign markets. Describe the general level of technological progress, including the degree of dependence on foreign technicians. Evaluate the capacity of the manufacturing industry to meet normal requirements and potential increased demands.

B. Industrial machinery and equipment

Under this heading the following manufactures are to be included: agricultural machinery and equipment (excluding tractors, which will be covered under Subsection 64, C and should be so noted in text); machine tools; electrical machinery and equipment; general purpose machinery (e.g., engines, turbines, conveyors, pumps, cranes, etc.); specialized equipment (e.g., coal mining machinery, metallurgical equipment, construction machinery, etc.); precision and machine building instruments; railroad motive power and rolling stock production and repair facilities.

1) Examine the importance of the industry in the economy and indicate its capacity to meet domestic requirements. Examine the size of the industry in terms of total production, capital investment and in relation to markets. Discuss production trends including technological advances. Indicate problems confronting the indus-

~~CONFIDENTIAL~~

try with respect to raw materials, location, domestic and foreign competition, and government policies and controls. (Tables: Total production and consumption including use pattern where possible, import and exports by countries or origin and destination, stocks, etc.)

2) List name, location, output, capacity, equipment, number of employees, and ownership of principal plants. Indicate factors affecting production of individual plants such as efficiency of labor, ability to meet foreign competition, plans for expansion, etc.

C. Motor vehicles (including tanks, self-propelled guns, etc.)

1) Discuss the position of the industry in the economy and examine its importance as an employer, a sector for investment, and a contributor to national income. Indicate the position of the industry with respect to domestic and foreign competition, government policies and controls.

2) Analyze the strategic supply position of finished products. Present in tabular form total annual consumption, including use pattern; total annual domestic production, actual and potential; annual imports and exports, including principal countries of origin and destination; stockpiles.

3) Show relationship of industry to foreign and domestic sources of raw materials, semi-manufactured products, and component parts.

4) List location and characteristics, and major products of final assembly plants or similar producing units, and related installations.

In textual and statistical form show the production and productive capabilities of individual major plants as regards passenger automobiles, trucks and busses, tractors, and motorcycles.

Treat specifically the reliance of the country on foreign supplies of finished vehicles and the dependence of assembly plants on foreign sources of component parts.

Describe generally the potentialities of the industry from a military point of view, especially its convertibility to the production of such military vehicles as tanks, half-tracks, and other combat vehicles. Give details of the current output of combat vehicles, but do not include numbers in use by military units.

D. Aircraft production

See Subsection C, 1)

Discuss jet and conventional aircraft production separately. The following classification of aircraft type will be used:

Fighter
Attack
Bomber
Transport
Trainer
Liaison and Light Civilian
Other Types

a) Analyze current status of aircraft industry—final assembly, airframe, engine, and propeller plants—and compare present total production with that achieved in World War II. Indicate dependency on foreign design and patents. Show military reserves and present strength, or indicate by cross reference that these data may be found in SECTION 83, Armed Forces.

b) Describe the dependence of the aircraft industry on foreign and domestic sources of raw materials, semi-manufactured products, and component parts.

c) List the location and physical characteristics of major plants producing aircraft and principal components, indicating the quantity and nature of products.

E. Shipbuilding

This Section should include both merchant and naval vessels, including submarines. Specific instructions for the preparation of this Section follows.

1. GENERAL SUMMARY

State the country's position as a shipbuilding nation of the world.

Discuss the position of the shipbuilding and ship repair industry in the national economy and examine its importance as an employer, a sector for investment and a contributor to national income. Indicate the industry's position with respect to domestic and foreign competition, government policies and controls.

Geographic locations of the centers of the shipbuilding industry in the country.

Principal sources of shipbuilding materials and supplies utilized in the industry.

Extent of ship repair activities, general discussion of.

Production (new construction) annual, capacity to produce.

2. MAJOR YARDS

Individual descriptions of major shipbuilding and ship repair yards. The following items *a* through *e* are to be completed for each major installation.

Name of the yard (name of city and subdivision thereof, if separately named), location (position with reference to outstanding landmarks on waterfront, rivers and tributaries), number of employees, size of yard, general comments regarding shipyard.

Shipbuilding and ship repair facilities. (Give location in yard, tabulate dimensions, approximate if actual are not known, size of ship accommodated, type of construction, machinery, weight handling equipment such as cranes, with names of manufacturers if known, lift capacities, rail connections, power, water and other available utilities, fire protection, security measures, etc.)

Shipbuilding materials and supplies used by the yard; finished, semi-finished, and raw materials, source of:

Manufacture within the yard, describe any accessory plants used to produce parts, fabricate materials, sub-assemblies, etc.

Domestic plants supplying yard, covering plants outside the confines of the yard producing component parts, equipment and special tools or machines, the capacity of these plants, size, number of employees and plant facilities.

Foreign plants supplying yard. (Name, location and products; whether same type as domestic plants, whether domestic plants could be expanded to do the same work, identifying marks on materials received by the yard from foreign sources and the method of delivery of the products received.

Extent of ship repair activities in the shipyard. Discuss the following:

Size of ship that can be repaired, whether repairs can be effected by means of caissons, without dry-docking, nature of repairs, plating, propeller, shaft repairs, welding under water; parts available or which may be fabricated, past experience, Lloyd's rating, technical skills available, type and amount of skilled labor, speed of work and hours worked, attitude of inspectors toward foreign ships, priorities, whether temporary repairs can be made if permanent repairs exceed facilities.

Annual production (number, types and countries for which produced):

Give production during normal years, also potential for expansion in emergencies, types specialized in, if any; adaptability for change from one type to another; whether yard has catered to one or more countries or to own merchant marine, and numbers produced for each.

Length of time between signing contract and laying of keel, launching and commissioning, on average. Give present and prospective requirements for steel, lumber, other construction materials and labor, and assess the impact upon the rest of the economy of those requirements.

3. MINOR YARDS

Tabulation of minor shipbuilding and ship repair yards together with a general summary as to the extent of shipbuilding and ship repair activities in those yards.

F. Explosives, industrial and military

See Subsection C, 1)—Optional—Cross reference if appropriate to J, 1.

Discuss the strategic supply position of finished products. Tabulate annual consumption, including use pattern; annual domestic production, actual and potential; annual imports and exports, including principal countries of origin and destination; stockpiles.

Describe the relationship of industry to foreign and domestic sources of raw and intermediate materials.

Give the location and characteristics, and major products, of plants and related installations.

Describe the capabilities of the country to produce propellants, primers and boosters, pyrotechnics, and high and low explosives. Treat specifically such products as nitrocellulose, nitroglycerine, mercury fulminate, lead azide, tetryl, aromatic nitro compounds (TNT, picric acid, DNB, TNA, etc.), RDX, PETN, inorganic nitrates, nitrostarch, chlorate, and perchlorate explosives.

Indicate how the explosives manufacturing activities are tied in with other phases of the munitions industry, mainly filling factories and ammunition plants.

G. Guns, explosive devices and ammunition

See Subsection C, 1)—Optional

Discuss the strategic supply position of finished products. Give annual consumption, including use pattern; annual domestic production, actual and potential; annual imports and exports, including principal countries of origin and destination; stockpiles.

Examine the relationship of the industry to foreign and domestic sources of raw materials, semi-manufactured products, and component parts.

Give location and characteristics, and major products, of final assembly plants or similar producing units, and related installations.

The topics of the outline will be treated with respect to the following products; military rifles, carbines, pistols; machine guns, automatic rifles;

guns, howitzers, mortars, cannon; rockets and rocket projectors, self-propelling and guided missiles; projectiles, ammunition, cartridges; fuzes; and grenades, bombs, torpedoes, mines, depth charges.

When particular items of equipment are of importance mainly to one service (navy, air force, army) treat separately (e.g., cannon special to aircraft, naval guns, etc.) when the subject is of sufficient importance to merit individual treatment.

Do not include discussion of the amounts of any of the products on hand in the possession of military units.

H. Other military equipment and supplies (including war gases and smoke preparations)

See Subsection C, 1)—Optional—Cross reference to Subsection J, 1, if relevant.

Discuss the strategic supply position of finished products. Give annual consumption, including use pattern; annual domestic production, actual and potential; annual imports and exports, including principal countries of origin and destination; stockpiles.

Describe the relationship of industry to foreign and domestic sources of raw materials, semi-manufactured products, and component parts.

Give location and characteristics, and major products, of final assembly plants or similar producing units, and related installations.

Treat especially the following types of miscellaneous military manufactures:

Miscellaneous weapons and devices such as flame-throwers; incendiaries; asphyxiating, lethal, and toxic gases or other incapacitating substances; smoke preparations; other deceptive or decoy devices.

Aiming and computing devices, including predictors and plotting apparatus, for fire control; direction of fire instruments; gun sights; bomb sights; fuze setters.

Optical and photographic equipment of types used extensively by armed forces (firing devices, periscopes, air cover cameras, etc.)

Instruments, motors, gauges used in motor vehicles, airplanes, and ships.

Miscellaneous personal equipment not of a civilian nature (gas masks, packs, etc.)

I. Telecommunications signal and lighting equipment

See Subsection C, 1)—Optional—Cross reference to appropriate section under B, Industrial Machinery and Equipment.

Discuss strategic supply position of finished products. Give annual consumption, including use pattern; annual domestic production, actual and potential; annual imports and exports, including principal countries of origin and destination; stockpiles.

Describe the relationship of industry to foreign and domestic sources of raw materials, semi-manufactured products, and component parts.

Give location and characteristics, and major products, of final assembly plants or similar producing units, and related installations.

Under telecommunications equipment treat telephone and telegraph instruments, and radio receivers and transmitters. Radar also will be included as a form of communications equipment.

In addition discuss military signaling devices, searchlights, and signal lighting equipment.

J. Chemical industries

This Subsection should cover heavy chemicals for industrial use, chemical fertilizers and chemical plastics (unfabricated). Chemical products destined for direct consumption, for example pharmaceutical products, should be treated under the heading Other Industries.

1. INDUSTRIAL CHEMICALS

The following list of industrial chemicals will serve as a guide for selecting those of importance in the area, which should be treated in this Subsection. Others not on the list should also be treated if their importance warrants.

Acetic acid
Alcohol (ethyl, methyl, butyl)
Ammonia
Bromine
Calcium carbide
Caustic soda and caustic potash
Chlorine
Coal tar products (benzol, tolnol, phenol, xylol, ammonium sulphate)
Commercial gases (oxygen, hydrogen, carbon dioxide, acetylene)
Fluorine compounds
Glycerine
Hydrochloric acid
Hydrogen peroxide
Nitric acid
Permanganates
Soda ash
Sulphuric acid
Synthetic dyes
Synthetic nitrogen products
Tetraethyl lead

See Subsection B, 1)

See Subsection B, 2)

2. CHEMICAL FERTILIZERS

The following fertilizers are suggested for consideration in this Subsection. Others of equal importance may be added.

Basic slag
Nitrates
Phosphates
Potassium and calcium compounds
Superphosphates

See Subsection B, 1)

See Subsection B, 2)

K. Agricultural processing industries

The following major types of agricultural processing plants are to be considered: tobacco, meat packing, beverages, canneries, sugar mills and refineries and oil processing plants. In certain areas other categories of installations will be important and should be given separate treatment.

See Subsection B, 1)

See Subsection B, 2)

L. Fibers, fabrics and rubber

The following major fibers, fabrics, and rubber industries should be included: synthetic fiber, paper and pulp, textiles, synthetic rubber shoes and leather, tires, rubber products, etc.

See Subsection B, 1)

See Subsection B, 2)

M. Construction industries

This Subsection should treat major construction firms or industries interested and utilized in residential, commercial, industrial and public works construction. Construction materials are treated in other sections of CHAPTER VI and appropriate reference should be made in this Subsection.

See Subsection C, 1)

Discuss briefly and in general major categories of construction, number of major firms involved, and adequacy and availability of skilled

and semi-skilled labor and equipment necessary for the industries concerned. Discuss growth of these industries, adequacy to meet present requirements and their ability to expand.

Tabulate major construction firms, their location, types of construction each firm is interested in, and amount of skilled and semi-skilled labor employed.

List outstanding and highly qualified personalities in the construction industry and note their special interests.

N. Other industries

This Subsection should treat two types of industries not treated elsewhere. First, those industries that are important in the economy of the area should be examined in detail according to requirements set up in B, 1) and B, 2). The analyst should not feel obliged to consider, here, industries employing less than 5% of the manufacturing labor force.

The second type of industries that should be treated here are those residual miscellaneous industries that the analyst feels should be treated briefly to round out the over-all analysis of the manufacturing sector of the economy. No special requirements are set up for this discussion.

O. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 65. Trade and Finance

A. General

Indicate the principal features of the country's domestic and foreign trade and the part it plays in the national economy. Discuss the country's currency and banking systems, and organization of public finances. Note significant changes in the country's balance of payments, especially during and since the war. Point out whether the country normally has an import or export surplus, and what is its debtor-creditor position (foreign assets and liabilities). Discuss the country's position in international markets. Describe the government's policy in the fields of domestic and foreign trade and finance.

B. Business organization

Discuss the juridical forms of business ownership. Indicate degree of interlocking financial relationship and dispersion of ownership.

C. Domestic trade and finance

1. PATTERN OF DOMESTIC TRADE

1) Describe the place of wholesale and retail trade in the national economy, showing its contribution to GNP, number of persons employed as percent of total labor force, etc.

2) Describe briefly the structure of the trade channels, (wholesale and retail), with special emphasis upon trade practices, ownership (private, state, cooperative), nature and degree of specialization.

2. DOMESTIC FINANCIAL INSTITUTIONS AND THEIR STRUCTURE

Under each of the following principal topics include relevant statistical data as much as possible in tabular form.

a. **BANKING AND CURRENCY SYSTEM** — Describe the banking system indicating the kinds of banks and their role in financing private industry and trade, agriculture and government. Describe briefly the central bank institution and discuss its role in the economy and government operations. Discuss flexibility of currency system and ability to meet changing economic requirements. Describe briefly the currency system of the country indicating the kinds of currency used, the amounts outstanding, name of the issuing authority. Explain the degree to which the currency is tied to gold or to some other foreign currency, such as sterling or dollar.

b. **INSURANCE COMPANIES AND OTHER FINANCIAL INSTITUTIONS (CREDIT UNIONS, ETC.)** — Describe briefly major features and operations.

c. **SECURITY MARKETS** — Describe briefly major features emphasizing role in providing and channeling investment funds.

d. **COMMODITY MARKETS** — List and briefly discuss the size, operations and government regulations relating to the major commodity markets.

3. GOVERNMENT FINANCE AND FISCAL POLICY

Under each of the following principal topics include relevant statistical data as much as possible in tabular form. In all cases compare with prewar base year and indicate trends.

a. **PUBLIC EXPENDITURES (NATIONAL BUDGET)** — Analyze budgets to determine, where possible, the distribution of public expenditures on a functional as well as organizational basis with special emphasis on national defense and scientific development, and adequate attention to welfare and economic development. Indicate the size and function of local budgets.

b. **REVENUE** — Describe briefly the tax systems and other sources of revenue of both national and intermediate governments. Analyze adequacy to meet revenue requirements and social and political factors which condition revenue patterns.

c. **GOVERNMENT DEBT** — Indicate the size of government debt, internal and foreign, and trace the trends during recent years. Discuss any particular problems that have arisen in connection with this debt, especially those involving servicing the foreign debt.

d. **GOVERNMENT MONETARY AND FISCAL POLICIES** — Describe briefly the government's fiscal and monetary policies. Specifically, consider the effect on monetary availabilities and purchasing power (and through them on the levels of national income) of the following policies:

Government surpluses and/or deficits
Public revenue system
Public expenditure pattern
Management of the public debt
Central bank policies, such as limitations on amount of issue, regulation of interest rates, reserve requirements, open market policies, etc.

e. **GOVERNMENT POLICIES TOWARD RESTRICTIVE TRADE PRACTICES** — Examine government policies toward cartels, monopolies, other restrictive trade practices, and toward cooperatives.

D. International finance and trade

Under each of the following principal topics include relevant statistical data as much as possible in tabular form.

1. BALANCE OF PAYMENTS POSITION

a. OVER-ALL — Discuss in over-all terms the balance of payments of the country indicating the net debit or credit position, the principal debit and credit items or groups of items and the principal debit and credit countries or monetary groupings. Indicate the extent to which commodity trade, other current accounts, and capital and monetary gold movements affect the balance of payments. Where significant, analyze the triangular or multilateral aspects of the balance of payments. Indicate changes in the pattern of the balance of payments during and since World War II. Draw up balance of payments statements for a typical pre-war year and one or more postwar years according to the presentation adopted by the International Monetary Fund.

b. CURRENT ACCOUNT

(1) *Commodity trade* — Show the relationship of the country's total foreign commodity trade to world trade and to its own national income. Describe the extent to which the country is dependent upon either imports or exports. Set forth the pattern of the country's foreign trade by commodity, by country of origin or destination, by quantity, value, and percentage distribution and variation. Indicate the more significant changes that have taken place in the preceding decade. Specify the countries and commodities upon which the foreign trade of the country is particularly dependent. Include a table of foreign trade showing by commodity, where data permits, the following: 1) volume, 2) value, 3) percentage distribution, and 4) country of origin and destination. If possible these should be given for different years in order to show fluctuation. These data should also be presented in graphic form when possible.

(2) *Other current items* — Discuss the pattern of current accounts, analyzing the significance of the major invisible items, shipping, insurance, interest, tourism, non-compensated remittances, etc.

c. CAPITAL AND GOLD MOVEMENTS — If the movements of capital and monetary gold need analysis in greater detail than in Subsection D, 1, a, it should be presented here.

2. FOREIGN ASSETS AND LIABILITIES

Discuss the country's position in recent years as an international debtor or creditor. Taking into consideration government and private investments, gold and foreign exchange holdings, etc., list the principal debtor or creditor countries, and indicate

amounts outstanding. Analyze the nature and magnitude of any intergovernmental loans or grants. Indicate the amount of foreign investment within the country by industry group and by investing country. Indicate the amount of investment abroad by industry group and country of investment. Evaluate the role of foreign assets or debts as they would affect wartime and other extraordinary foreign expenditures. Describe changes in holdings of foreign exchange and gold during recent years and examine their effect upon foreign trade and international payments.

Draw up a table of estimates of the country's private and government assets or investments in foreign countries and of foreign countries' assets or investments in the subject country, showing gross values outstanding as of the end of recent fiscal or calendar years. Data should be shown by classes of property, investment, or claim by foreign countries or areas in which country's assets or investments or its obligors are located, or which own or hold assets or investments in the country, or obligations of the country. The country's estimated total net creditor or debtor position should be given, as well as its net position with regard to particular classes of assets or with individual foreign countries or areas.

The type of data and table intended can be judged by referring to the following:

Debtor and Creditor Countries: 1938, 1944 by Cleora Lewis, published by the Brookings Institution, Washington, D. C., 1945. The 1938 estimates cover all countries of the world for which data were available, but list only long-term, not short-term assets.

U.S. Treasury Department, Office of the Secretary, *Census of American Owned Assets in Foreign Countries, 1947*, Table I, p. 9, Table III, p. 17, and Table VI, p. 26.

U.S. Treasury Department, Office of the Secretary, *Census of Foreign Owned Assets in the United States, G.P.O., 1945*, Washington, D. C., Table IV, p. 18, Table V, p. 19, Table VII, p. 22.

U.S. Department of Commerce, *The Balance of International Payments of the United States, 1946-48*, G.P.O., Washington, D. C., 1950, pp. 162-165, "Table 36—International investment position of the U.S. by area, 1945-1948."

Where data are not available indicate by appropriate entry in the table.

3. GOVERNMENT POLICIES, PRACTICES AND INSTITUTIONS RELATIVE TO INTERNATIONAL TRADE AND FINANCE

Discuss the nature, extent, and effectiveness of government controls on foreign exchange and foreign trade and their relationship to each other. Indicate to what extent these controls are permanent or of an emergency character. Discuss the purpose of such controls and the extent to which they modify the trade pattern.

JUNE 1951

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Discuss governmental policy, practices and institutions in respect to the following matters:

**a. COMMERCIAL POLICY AND STATE INTERVENTION
IN INTERNATIONAL TRADING**

Tariffs, subsidies and incentives
Quantitative restrictions
State trading, bulk buying, bilateral agreements, etc.
Relations with international trade organizations

b. INTERNATIONAL FINANCE

Foreign exchange rates—Indicate changes that have occurred in country's exchange rates during recent years; account for such changes by reference to inflationary policies, occupation by foreign powers, deliberate economic warfare, etc.
Participation in international payments and clearance arrangements, e.g., IPU—
Relations with international financial institutions, e.g., IMF—
Controls and safeguards affecting international investment—

4. FOREIGN TRADE ORGANIZATIONS

Discuss briefly the nature of foreign trade organizations, including cartels, which control the movement of goods. Indicate the extent to which

such organizations influence the volume and character of the foreign trade.

E. Government wartime financing

Discuss the manner in which the government financed its expenditures during the recent war, in financing its domestic and foreign procurement. Indicate major developments since the outbreak of World War II that affect its ability in this regard.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER VII

SCIENTIFIC

Section 70 Introduction
Section 71 Electronics
Section 72 Air, Ground, and Naval Weapons
Section 73 Atomic Energy
Section 74 Biological Warfare (BW)
Section 75 Chemical Warfare (CW)
Section 76 Miscellaneous

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Chapter VII - Scientific

OUTLINE

SECTION 70. INTRODUCTION

- A. Development and evaluation of scientific effort
 - 1. General structure of the scientific effort
 - 2. Current trends
 - 3. Evaluation
- B. Organization for research
 - 1. Governmental organization
 - 2. Armed forces
 - 3. Academies and higher educational institutions
 - 4. Privately-owned research organizations
- C. Education, training and procurement of scientific personnel
- D. Appropriations
 - 1. Public and private funds allotted for research and development
 - 2. Prizes, awards, and scholarships
- E. Comments on principal sources

SECTION 71. ELECTRONICS

- A. General
- B. Radio communications
- C. Communications equipment other than radio
- D. Navigation aids
- E. Radar
- F. Infrared
- G. Acoustics
- H. Vacuum tubes
- I. Components and special devices
- J. Electronic countermeasures
- K. Personalities
- L. Comments on principal sources

SECTION 72. Air, Ground, and Naval Weapons

- A. General

B. Aircraft and aircraft armament

- 1. General
- 2. Airframes
- 3. Aircraft propulsion
- 4. Aircraft ordnance
- 5. Other aircraft equipment
- 6. Personalities

C. Guided missiles

- 1. General
- 2. Guidance and control
- 3. Propulsion
- 4. Aerodynamics and structure
- 5. Warheads and fuzing
- 6. Organization for research and development
- 7. Installations
- 8. Personalities

D. Antiaircraft weapons and equipment

- 1. General
- 2. Guns and ammunition
- 3. Unguided rockets
- 4. Fire control equipment
- 5. Personalities

E. Ground weapons and equipment

- 1. General
- 2. Combat vehicles
- 3. General purpose vehicles
- 4. Artillery
- 5. Infantry weapons
- 6. Mines and mine clearance equipment
- 7. Stream crossing equipment
- 8. Special arctic equipment
- 9. Other
- 10. Personalities

F. Naval weapons

- 1. General
- 2. Hull designs
- 3. Ship propulsion
- 4. Underwater ordnance
- 5. Surface ordnance
- 6. Personalities

G. Comments on principal sources

SECTION 73. ATOMIC ENERGY

- A. General
- B. Organization
- C. Appropriations
- D. Scientific training program
- E. Personalities
- F. Research facilities
- G. Supporting industrial firms
- H. Sources and production of basic materials
- I. Production of reactive materials
- J. Applications
- K. Comments on principal sources

SECTION 74. BIOLOGICAL WARFARE (BW)

- A. General
- B. Capabilities, organization and policies for research and development

- C. Research, development and field testing
- D. Installations
- E. Personalities
- F. Comments on principal sources

SECTION 75. CHEMICAL WARFARE (CW)

- A. General
- B. Capabilities, organization and policies for research and development
- C. Research, development and field testing
- D. Installations
- E. Personalities
- F. Comments on principal sources

SECTION 76. MISCELLANEOUS

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

The following is intended to serve as a general instruction for the production of CHAPTER VII. Relevant features contained herein, modified to conform with the area being covered, shall be included with the finished CHAPTER VII to serve as a guide for the reader.

CHAPTER VII (Scientific) is devoted to the relatively permanent and fundamental aspects of scientific research and development in the subject area. Material contained in the chapter should be adequate to provide key scientific intelligence analysts with a basis for preparing estimates for such bodies as the National Security Council, the Research and Development Board, the Joint Chiefs of Staff, and the National Security Resources Board, and for departmental planning components.

Since science enters strongly into present-day military planning connected with the national security, CHAPTER VII places emphasis on the military aspect of scientific research and development. It is recognized, however, that much of the advance in military technology generates from non-military laboratories and that the entire scientific base of a country contributes to a certain extent to the military potential of the country. CHAPTER VII therefore should also cover subjects which have no direct military application but which are of significance.

The particular area covered by CHAPTER VII, of course, influences the volume and scope of the textual presentation. For example, treatment concerning the U.S.S.R. is only complete when full coverage is provided for salient contributions of U.S.S.R. satellite nations.

A clearer understanding of the purpose of CHAPTER VII is provided by consideration of its relationship with certain other chapters of the over-all NIS presentation. Generally speaking, CHAPTER VII covers scientific research and development through the prototype stage of materiel, whereas CHAPTER VI (ECONOMIC) deals with the manufacture of materiel and CHAPTER VIII (ARMED FORCES) with the quality, quantity, and characteristics thereof. CHAPTER IV (SOCIOLOGICAL) deals with the educational system as a whole and with the educational level of the population whereas CHAPTER VII deals with educational institutions and learned societies

which are engaging in scientific research. Since it is recognized that essentially all aspects of atomic energy and biological warfare, including the manufacture and capabilities thereof, fall within the field of scientific intelligence, all such aspects should be respectively treated in SECTIONS 73 (ATOMIC ENERGY) and 74 (BIOLOGICAL WARFARE) and no aspect is treated in CHAPTER VI or CHAPTER VIII. Manufacture of chemical warfare material is, however, treated in CHAPTER VI and the quality, quantity, and characteristics of such materiel in CHAPTER VIII.

Because the over-all field of scientific research and development is not static, the line of demarcation between basic and current scientific intelligence is not always clear cut. This line may be particularly hazy in the subjects of research and development programs as such programs, if handled with normal efficiency and force, are likely, in their progress, to generate from day to day new facts of interest. It is the intent that CHAPTER VII provide comprehensive coverage of significant research and development programs. However, that coverage should be limited to the origin, objectives, history, general progress and an indication of basic trends (avoid estimates and opinions which should be reserved for other types of intelligence production) of the programs as of the time of writing. Also, it must be recognized that the inclusion of a mass of ephemeral, as opposed to fundamental, details may require too frequent revision of the chapter and may tend to confuse or even mislead the reader. In view of the foregoing, good judgment must be exercised to determine which details are to be included and which are to be excluded. As a matter of fact, however, the very nature of scientific research and development is such as almost uniformly to require protection of them by the most nearly impervious counter-intelligence screen that the country in which they are being conducted is able to erect. Hence, the amount of detail concerning them is more likely to be little than great. Therefore, in the preparation of the text frequent acute problems of selectivity are not anticipated and, in any event, it is desired to err on the side of including too many details rather than too few.

JUNE 1951

Section 70. Introduction

A. Development and evaluation of scientific effort

1. GENERAL STRUCTURE OF THE SCIENTIFIC EFFORT

Cover the history and tradition of scientific research and development in the subject area. Refer to the position of science and show clearly the governmental attitude toward scientific research. Include references to social and economic positions enjoyed by scientists in the subject area. Evaluate briefly scientific scholarship. (Individuals should be covered in appropriate Section.)

2. CURRENT TRENDS

State the field or fields of endeavor in which notably outstanding work is done, or is likely to be done. Outline capabilities and potentialities of converting research and development in case of war. Give outstanding contributions to scientific theory and to applied research (reference other sections of this Chapter).

3. EVALUATION

Present an evaluation of scientific scholarship and the levels of achievement in pure and applied science. Cover the various factors and aspects of the scientific effort in terms of their strengthening or weakening this effort. Include considerations relating to scientific organization, political control, scientific philosophy, technical resources, etc.

B. Organization for research

Provide identification of the main organizations and types of organizations; their interrelationship and coordination; whether planned or spontaneous. Present the relative significance of each organization or group of organizations of a given type. Indicate how research projects originate and are sustained. Refer to cooperation and the dissemination of ideas. Cover planning.

1. GOVERNMENTAL ORGANIZATION

Cover the structure for controlling, supervising, or advising scientific research and development outside the Armed Forces.

2. ARMED FORCES

Describe research organizations within the Armed Forces and research organizations controlled or supervised by or for the Armed Forces.

3. ACADEMIES AND HIGHER EDUCATIONAL INSTITUTIONS

Describe organizations that are actively engaged in participating or fostering research, with signifi-

cance and relation to the governmental organization. (Mention only higher educational establishments which have outstanding reputations in scientific fields.) Cover briefly outstanding types of research accomplishment. There should be extensive cross-referencing to CHAPTER IV, where the basic education system is covered. Close coordination should be established with the Department of State, which is the agency responsible for CHAPTER IV.

4. PRIVATELY-OWNED RESEARCH ORGANIZATIONS

Describe industrial organizations engaged in research, the type, caliber and significance of this research. Cover the relationship with government organization, if evident. Include foreign affiliations, if any. There should be extensive cross-referencing to CHAPTER VI and close liaison established with the Department of State.

C. Education, training and procurement of scientific personnel

Discuss the training of scientists, particularly in the higher schools and in postgraduate work. Make an attempt to evaluate academic standards.

D. Appropriations

1. PUBLIC AND PRIVATE FUNDS ALLOTTED FOR RESEARCH AND DEVELOPMENT

Refer to public and private funds allotted for research and development, indicating how funds are allotted among various fields, organizations, and/or scientists.

2. PRIZES, AWARDS, AND SCHOLARSHIPS

Cover prizes, awards and scholarships for scientific research and development.

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 71. Electronics

A. General

Contains a brief discussion of the capabilities of the subject nation in electronic research and development. If sufficiently outstanding, mention may be made of governmental support of research or training of electronic personnel. Aid, such as Lend-Lease, ECA support, or outright sale of electronic equipment or information, that has been supplied from other countries will be mentioned. The outstanding research laboratories and developmental establishments should be discussed briefly.

B. Radio communications

Contains a general discussion concerning the types of equipment being developed, its modernity, indications of the development of unusual types of radio apparatus, and the adequacy of the equipment supplied. A general discussion of the probable tactical application of radio communications may be included, but a detailed list of specific equipment is not desired.

C. Communications equipment other than radio

Contains a general discussion concerning the types of equipment being developed, its modernity, indications of the development of unusual types of communications apparatus in this category, and the adequacy of the equipment supplied.

D. Navigation aids

Contains a general discussion of the types of electronic navigational aids being developed by the subject nation, such as radar, radio beacons, direction-finding stations, etc.

E. Radar

Contains a general discussion of the important types of radar and radar recognition (IFF) equipment being developed by the subject nation.

F. Infrared

Contains a general discussion of the important infrared development under way in the subject nation.

G. Acoustics

Contains a general discussion of the important types of underwater sound devices with mention of other acoustic developments of significance.

H. Vacuum tubes

Contains a discussion of the capabilities of the subject nation in the design of all types of vacuum tubes. Mention should be made of the characteristics of any special types that are being developed, and of unusual applications of those developments.

I. Components and special devices

Briefly discuss the various types of components, special electronic devices, and laboratory equipment not covered by the preceding paragraphs.

J. Electronic countermeasures

Contains a brief discussion of ECM techniques which have been devised by the subject nation, together with a description of the important equipments planned to implement those techniques. An important part of this Subsection is the assessment, whenever possible, of the susceptibility of the nation's electronic devices to countermeasures.

K. Personalities

Provide a listing, with specialties and other pertinent information, of the outstanding personalities in the program.

L. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 72. Air, Ground, and Naval Weapons

A. General

Summarize the over-all capabilities of the subject country on research and development in regard to air, ground and naval weapons and other materiel referred to throughout this Section. When so desired in the preparation of this Subsection, it may be broken down into further divisions to specifically refer to individual items such as guided missiles, naval weapons, etc. The summary shall include an indication of the principal conclusions reached.

B. Aircraft and aircraft armament

1. GENERAL

Evaluate the over-all research and development capabilities of the subject country in the field of aircraft and aircraft armament, and summarize the principal conclusions.

2. AIRFRAMES

a. ORGANIZATION FOR RESEARCH AND DEVELOPMENT — A general picture is desired of military and civilian organizations which supervise, advise, control, or conduct significant research and development of airframes.

b. INSTALLATIONS — Describe briefly airframe research development and test facilities and indicate their effect on research and development capabilities.

c. BASIC TRENDS — Discuss basic research and development trends in design aspects of military and civilian aircraft types; avoid reference to specific items currently under development and limit the discussion to continuing basic projects.

3. AIRCRAFT PROPULSION

Follow the guide outlined in Subsection B, 2 above; include design aspects of reciprocating, jet, turboprop, and rocket power plants.

4. AIRCRAFT ORDNANCE

Follow the guide outlined in Subsection B, 2 above; include aircraft machine guns, cannon, rockets, bombs, bombsights, etc.

5. OTHER AIRCRAFT EQUIPMENT

Follow the guide outlined in Subsection B, 2 above; include such equipment as pressurization, oxygen and ejection systems, etc.

6. PERSONALITIES

Include brief biographic data on key personnel which provide insight into research and development capabilities. (Cross-reference personnel concerned with any other of the subjects covered by this Section.)

C. Guided missiles

1. GENERAL

Evaluate the over-all research and development capabilities of the subject country in the field of guided missiles, and summarize the principal conclusions.

2. GUIDANCE AND CONTROL

Discuss research and development trends in guidance and control; in general, limit the discussion to continuing projects, but refer to specific items currently under development where indicative of trends.

3. PROPULSION

Follow the guide outlined in Subsection C, 2 above.

4. AERODYNAMICS AND STRUCTURE

Follow the guide outlined in Subsection C, 2 above.

5. WARHEADS AND FUZING

Follow the guide outlined in Subsection C, 2 above.

6. ORGANIZATION FOR RESEARCH AND DEVELOPMENT

A general picture is desired of military and civilian organizations which supervise, advise, control, or conduct significant research and development.

7. INSTALLATIONS

Describe briefly research, development, test facilities, and proving grounds and indicate their effect on the missile program.

8. PERSONALITIES

Include brief biographic data on key personnel which provide insight into research and development capabilities. (Cross-reference personnel concerned with any other of the subjects covered by this Section.)

JUNE 1951

S C I E N T I F I C

~~CONFIDENTIAL~~**D. Antiaircraft weapons and equipment****1. GENERAL**

Evaluate the over-all research and development capabilities of the subject country in surface launched antiaircraft weapons (excluding guided missiles), and summarize the principal conclusions.

2. GUNS AND AMMUNITION

a. ORGANIZATION FOR RESEARCH AND DEVELOPMENT — A general picture is desired of military and civilian organizations which supervise, advise, control, or conduct significant research and development pertaining to guns and ammunition, including fuzing.

b. INSTALLATIONS — Describe briefly research, development and test facilities and indicate their effect on research and development capabilities.

c. BASIC TRENDS — Discuss basic research and development trends in design aspects of antiaircraft gun and ammunition types; avoid reference to specific items currently under development and limit the discussion to continuing basic projects.

3. UNGUIDED ROCKETS

Follow the guide outlined in Subsection D, 2 above; include design aspects of unguided rockets and associated equipment of the "Taifun" types.

4. FIRE CONTROL EQUIPMENT

Follow the guide outlined in Subsection D, 2 above; include design factors relative to unique electronic and mechanical antiaircraft fire control systems and associated equipment.

5. PERSONALITIES

Include brief biographic data on key personnel which provide insight into research and development capabilities. (Cross-reference personnel concerned with any other of the subjects covered by this Section.)

E. Ground weapons and equipment**1. GENERAL**

Evaluate the over-all research and development capabilities of the subject country in the field of ground weapons and equipment and summarize the principal conclusions.

2. COMBAT VEHICLES

a. ORGANIZATION FOR RESEARCH AND DEVELOPMENT — A general picture is desired of military and civilian organizations which supervise, advise, control, or conduct significant research and development of combat vehicles, including self-propelled guns.

b. INSTALLATIONS — Describe briefly combat vehicle development and test facilities and indicate their effect on research and development capabilities.

c. BASIC TRENDS — Discuss basic research and development trends in design aspects of combat vehicles; avoid reference to specific items currently under development and limit the discussion to continuing basic projects.

3. GENERAL PURPOSE VEHICLES

Follow the guide outlined in Subsection E, 2 above; include design aspects of unique development relative to power plants, transmission and traction devices.

4. ARTILLERY

Follow the guide outlined in Subsection E, 2 above, including field, antitanks, howitzers, ground support rockets, and mortars together with associated fire control equipment and ammunition, but excluding antiaircraft weapons covered in Subsection D above.

5. INFANTRY WEAPONS

Follow the guide outlined in Subsection E, 2 above, including small arms, machine guns, anti-tank rifles, grenades, bazookas, etc., and associated ammunition.

6. MINES AND MINE CLEARANCE EQUIPMENT

Follow the guide outlined in Subsection E, 2 above, including mines and associated fuzes, actuating and control devices, as well as detection and clearing equipment.

7. STREAM CROSSING EQUIPMENT

Follow the guide outlined in Subsection E, 2 above, including bridging in general as well as assault boats and other associated equipment.

8. SPECIAL ARCTIC EQUIPMENT

Follow the guide outlined in Subsection E, 2 above, including shelter, clothing, rations, vehicles, fuels and lubricants and other unique special equipment or materiel.

9. OTHER

Follow the guide outlined for Subsection E, 2 above, in discussing any other ground weapons or equipment.

10. PERSONALITIES

Include brief biographic data on key personnel which provide insight into research and development capabilities. (Cross-reference personnel concerned with any other of the subjects covered by this Section.)

PAGE VII-7

F. Naval weapons**1. GENERAL**

Evaluate the over-all research and development capabilities of the subject country in the field of naval weapons and equipment and summarize the principal conclusions.

2. HULL DESIGNS

a. **ORGANIZATION FOR RESEARCH AND DEVELOPMENT** — A general picture is desired of naval and civilian organizations which supervise, advise, control, or conduct significant research and development of ship hull designs.

b. **INSTALLATIONS** — Describe briefly hull design research, development and test facilities and indicate their effect on research and development capabilities.

c. **BASIC TRENDS** — Discuss basic research and development trends in design aspects of naval vessels; avoid reference to specific items currently under development and limit the discussion to continuing basic projects.

3. SHIP PROPULSION

Follow the guide outlined in Subsection F, 2 above; include design aspects of turbine, jet and closed-cycle power plants.

4. UNDERWATER ORDNANCE

Follow the guide outlined in Subsection F, 2 above; include such weapons as mines, torpedoes,

depth charges, ahead-thrown weapons, water-penetrating rockets and their launchers, fire control systems, etc.

5. SURFACE ORDNANCE

Follow the guide outlined in Subsection F, 2 above; include anti-surface vessel offensive weapons and associated fire control and target designation systems.

6. PERSONALITIES

Include brief biographic data on key personnel which provide insight into research and development capabilities. (Cross-reference personnel concerned with any other of subjects covered by this Section.)

G. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 73. Atomic Energy**A. General**

A brief summary of the over-all capabilities in the field of atomic energy.

B. Organization

Details of governmental organizations for the control of atomic energy activities including the names of people in important positions.

C. Appropriations

A summary of appropriations for atomic energy research, development and production, laboratory maintenance, construction or expansion.

D. Scientific training program

A summary of government and privately-sponsored programs designed to increase the numbers of technically-trained personnel in this field.

E. Personalities

A listing with specialties and other pertinent information, of the outstanding personalities in the program.

F. Research facilities

Descriptions of principal facilities, government and private, engaged in research and development in the field of atomic energy, discussing the physical size, the organization, equipment available, and usual types of research undertaken.

JUNE 1951

SCIENTIFIC

~~CONFIDENTIAL~~**G. Supporting industrial firms**

Industrial firms capable of, or known to be, furnishing major support to an atomic energy project, but not covered under H or I.

H. Sources and production of basic materials

Location of mines and processing plants and description of processes involved from raw material to end product for such essential materials as uranium, thorium, heavy water, beryllium, pure graphite, pure calcium, magnesium, lithium, etc.

I. Production of reactive materials

Plants and equipment actually engaged in the production of reactive materials on other than a laboratory scale including description of processes and equipment and total production.

J. Applications

Estimate of capabilities for various applications, apparent and/or announced, of the atomic energy program, such as weapons, power, isotopes for medical research, or basic research.

K. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 74. Biological Warfare (BW)**A. General**

Summarize the following topics: the over-all capabilities of the subject country in the BW field; the general historical background of its BW activities; the attitude of the government and people toward the development of this program; the general organization and control of BW activities and the priority established in relation to other scientific programs; and the general plans and preparations for future use of and defense against BW. This brief statement or summary should reflect the conclusions reached by the following subsections, including the industrial potential of the country to produce agents and materiel for warfare.

B. Capabilities, organization and policies for research and development

The purpose of this Subsection is to assess the capacity and effectiveness of the directional and supervisory forces existing in the country, as well as to show the extent of the current scientific and technical effort bearing on BW, and the feasibility of conversion to a military effort in case of total war. This topic should cover an organizational outline or summary of the interrelationships of the following: top-level government administration; research institutes and applied research laboratories under direct governmental control; field-testing stations; and non-governmental activities,

including university and industrial laboratories wherein pure and applied research may be deemed to support the governmental BW program. (Details listing facilities and personnel of specific installations to be discussed in Subsections D and E.)

Give the current capabilities of the subject nation in respect to BW research and development; the policies of that government governing the control, development and exploitation of BW and funds allocated for basic and applied BW research and development.

C. Research, development and field testing

This Subsection is directed toward research and development of BW agents; new material and techniques for dissemination; and new materials or techniques for detection, identification and protection. (Lists of installations and personalities should be given in Subsections D and E.) It is suggested that the subject matter be treated as follows:

1) Discuss the research program on developmental BW agents and list those that have been studied or tested.

2) Discuss pilot stage of developing BW agents and any evidence of full scale production, stockpiling, field testing and standardization of materials so produced.

~~CONFIDENTIAL~~

PAGE VII-9

3) Discuss raw materials, new developments in processes, requirements for special materials and equipment for the production of BW agents and materiel. This Subsection might also well include any known plans for the production of such materials that may be presumed to be under consideration. Critical shortages of these, or recognized inability to produce, should be pointed out.

4) Discuss research and development programs directed toward the production of new and improved materials, techniques and equipment for defensive BW, e.g., detection (materiel and techniques); impermeable clothing or impregnated fabrics; filters; paper for filters; charcoal and other absorbents; masks; shelters; decontaminants; prophylactics (immunization, etc.); treatment of man, animal or plant victims (antibiotics, drugs, antidotes, isolation, killing or destruction, etc.). (References can be made to appropriate medical and public health sections of the NIS for details.)

5) Present similar information as in Subsection C, 4) concerning research and development on types of equipment and methods for the dissemination of BW agents and field testing of any equipment produced through pilot plant operation, e.g., such as: generation or dispersal by explosive charges, special propellants and aerosol bombs; dispersal of liquids and solid masses by nozzels and other devices; and simplified methods of dissemination, special munitions, etc.

6) Present studies leading to more adequate assessment of the relative effects or requirements in combat or strategic bombing of a) BW vs. HE and others, and b) the different BW disseminating methods or munitions under specific micro-

meteorological and climatological conditions. Any meteorological studies specifically directed toward BW should be included.

D. Installations

Give exact locations, descriptions, and brief statement of activities of known and suspected BW research installations and pilot plants; plants for production of BW agents; and munitions still in development and testing installations and areas. Available information on special equipment and other facilities of these installations should be described also.

E. Personalities

Give the full names, positions and brief biographies (include accomplishments) of the principal personalities (scientists and administrators) involved in BW research and development.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 75. Chemical Warfare (CW)

A. General

Summarize the following topics: the over-all capabilities of the subject country in the CW field; the general historical background of its CW activities; the attitude of the government and people toward the development of this program; the general organization and control of CW activities and the priority established in relation to other scientific programs; and the general plans and preparations for future use of and defense against CW. This brief statement or summary should reflect the conclusions reached by the following subsections, including the industrial potential of the country to

produce agents and materiel for warfare. (The details of chemical industries, etc., are given in CHAPTER VI.)

B. Capabilities, organization and policies for research and development

The purpose of this Subsection is to assess the capacity and effectiveness of the directional and supervisory forces existing in the country, as well as to show the extent of the current scientific and technical effort bearing on CW, and the feasibility of conversion to a military effort in case of total war.

JUNE 1951

SCIENTIFIC

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This topic should cover an organizational outline or summary of the interrelationships of the following: top-level government administration; research institutes and applied research laboratories under direct governmental control; field-testing stations; and non-governmental activities, including university and industrial laboratories where pure and applied research may be deemed to support the governmental CW program. (Details listing facilities and personnel of specific installations to be discussed in Subsections D and E.)

Give the current capabilities of the subject nation in respect to CW research and development; the policies of that government governing the control, development, and exploitation of CW and funds allocated for basic and applied CW research and development.

C. Research, development and field testing

This Subsection is directed toward research and development of new CW agents, smokes, incendiaries, flame warfare materials; new materials or techniques for dissemination; and new materials or techniques for detection, identification and protection. (Lists of installations and personalities should be given in Subsections D and E.) It is suggested that the subject matter be treated as follows:

1) Discuss the research program on new or developmental CW agents and list those that have been studied or tested. (New CW agents shall be understood as those not to have been developed beyond the pilot plant stage, or those for which full schedule production has not been established on a firm basis as, for example, the German nerve gases, in the case of intelligence pertaining to the U.S.S.R.)

2) Discuss pilot stage of developing new CW agents and any evidence of full scale production, stockpiling, field testing and standardization of materials so produced.

3) Discuss raw materials, new developments in process, requirements for special alloys, materials and equipment for the production of new CW agents and materiel. This Subsection might also well include any known plans for the production of such materials that may be presumed to be under consideration. Critical shortages of these, or recognized inability to produce, should be pointed out.

4) Discuss research and development of flame warfare materials, incendiaries and smokes (fuels and materiel).

5) Discuss research and development programs directed toward the production of new and improved materials, techniques and equipment for

defensive CW, e.g., detection (materiel and techniques); impermeable clothing or impregnated fabrics; filters; paper for filters; charcoal and other absorbents; masks; shelters; decontaminants; treatment of casualties (ointments, antidote, etc.).

6) Present similar information as in subsection C, 5 concerning research and development on new types of equipment and methods for the dissemination of CW agents and field testing of any equipment produced through pilot plant operation, e.g., such items as generation or dispersal by explosive charges, special propellants, aerosol bombs, and special heat generators; dispersal of liquids and solid masses by nozzles and other devices; and simplified methods of dissemination, special munitions, etc.

7) Present studies leading to more adequate assessment of the relative effects or requirements in combat or strategic bombing of a) CW vs. HE and others, and b) the different CW disseminating methods or munitions under specific micrometeorological and climatological conditions. Any meteorological studies specifically directed toward CW should be included.

D. Installations

Give exact locations, descriptions, and brief statement of activities of known and suspected CW research installations and pilot plants; plants for production of CW agents and munitions still in development; and testing installations and areas. Available information on special equipment and other facilities of these installations should be described also.

E. Personalities

Give the full names, positions and brief biographies (include accomplishments) of the principal personalities (scientists and administrators) involved in CW research and development.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

PAGE VII-11

Section 76. Miscellaneous

As a general over-all requirement for each Area, all phases of relatively permanent and fundamental aspects of scientific research and development, through the prototype stage, which are not otherwise covered in the NIS text, but which have potential military significance must be considered for inclusion within this Section. Final determination as to whether or not certain subjects will be discussed shall depend upon their importance within the particular area and the availability of production manpower.

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER VIII

ARMED FORCES

Section 80 Introduction
Section 81 Ground Forces
Section 82 Naval Forces
Section 83 Air Forces

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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JUNE 1951

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Chapter VIII - Armed Forces

OUTLINE

SECTION 80. INTRODUCTION

- A. General
- B. Structure of Armed Forces
 - 1. Composition
 - 2. Top control
- C. Size of Armed Forces
- D. Position of Armed Forces in the nation
 - 1. Legal basis
 - 2. Traditions
 - 3. Political influence
 - 4. Fiscal control
- E. Manpower
 - 1. Available manpower for Armed Forces
 - 2. Quality of manpower
 - 3. Conscription
- F. Comments on principal sources

SECTION 81. GROUND FORCES

- A. General
- B. Administrative organization
 - 1. Army high command
 - 2. Territorial organization
 - 3. Arms and services
- C. Tactical organization
 - 1. General
 - 2. Higher headquarters
 - 3. Staff organization
 - 4. Combat units
 - 5. Service units
- D. Order of battle
 - 1. Strength
 - 2. Dispositions
- E. Strategy and defenses
 - 1. Strategic problems and doctrines
 - 2. Permanent fortifications
- F. Tactics
 - 1. Basic tactical doctrines
 - 2. Special operations
- G. Personnel
 - 1. Ranks
 - 2. Pay
 - 3. Procurement and terms of service
 - 4. Quality factors
- H. Reserve and mobilization system
 - 1. Reserve system
 - 2. Mobilization system
 - 3. Mobilization potential

- I. Training
 - 1. General
 - 2. Pre-induction training
 - 3. Individual training
 - 4. Unit and combined training and maneuvers
 - 5. Reserve training
 - 6. Schools and installations
- J. Logistics
 - 1. Classification of materiel
 - 2. Procurement
 - 3. Peacetime storage and issue
 - 4. War supply and movement
 - 5. Maintenance
 - 6. Evaluation
- K. Materiel
 - 1. Ordnance
 - 2. Signal
 - 3. Quartermaster
 - 4. Engineer
 - 5. Chemical
 - 6. Medical
- L. Personalities
 - 1. Biographical sketches
 - 2. List of personalities
- M. Quasi-military and other ground forces
- N. Comments on principal sources

SECTION 82. NAVAL FORCES

- A. General
- B. Organization
 - 1. Naval high command
 - 2. Naval districts, zones or activities
 - 3. Naval communications network
 - 4. Forces afloat
 - 5. Other naval organizations
- C. Strength and disposition
 - 1. Ships
 - 2. Personnel
- D. Policy and doctrine
 - 1. Naval strategic concepts
 - 2. Doctrine
 - 3. Naval budget and appropriations
 - 4. Construction and development programs
 - 5. Naval relationships with other countries
 - 6. National attitude toward the Navy

PAGE VIII-1

- E. Personnel
 - 1. Corps and services
 - 2. Rank and rates
 - 3. Personnel procurement
 - 4. Conditions of service
 - 5. Naval uniforms and insignia
- F. Reserve and mobilization system
 - 1. Ships
 - 2. Personnel
 - 3. Merchant marine and other auxiliary forces
 - 4. Adequacy of mobilization system
- G. Training
 - 1. General
 - 2. Training facilities
 - 3. Officer training
 - 4. Enlisted training
 - 5. Shipboard training
 - 6. Fleet and force training
 - 7. Reserve training
- H. Logistics
 - 1. Procurement
 - 2. New construction, repair and maintenance
 - 3. Centers of supply
- I. Ship design and characteristics
 - 1. Design of ships
 - 2. Strategic characteristics
- J. Materiel
 - 1. General
 - 2. Characteristics
- K. Personalities
 - 1. Flag and ranking officers
 - 2. Biographies
- L. Comments on principal sources

SECTION 83. AIR FORCES

- A. GENERAL
 - 1. Tactical air support capabilities
 - 2. Air defense capabilities
 - 3. Strategic air capabilities
 - 4. Air facilities
 - 5. Trends
- B. ORGANIZATION
 - 1. High command
 - 2. Subordinate commands and units
- C. AIR ORDER OF BATTLE
 - 1. Unit order of battle
 - 2. Means of identification
 - 3. Aircraft acquisitions
- D. TACTICAL AIR
 - 1. Close tactical air support
 - 2. General tactical air support
 - 3. Military air transport capabilities
- E. AIR DEFENSE
 - 1. General
 - 2. Organization

- 3. Warning and intercept systems
- 4. Aircraft defense
- 5. Antiaircraft artillery defense
- 6. Passive air defense
- F. STRATEGIC AIR
 - 1. Bomber capabilities
 - 2. Strategic reconnaissance
 - 3. Bomber escort
 - 4. Coordination with ground and sea forces
- G. PERSONNEL
 - 1. Procurement
 - 2. Personnel characteristics and morale
 - 3. Uniforms and insignia
- H. RESERVE AND MOBILIZATION SYSTEMS
 - 1. Reserve system
 - 2. Mobilization system
 - 3. Mobilization potential
- I. TRAINING
 - 1. General
 - 2. Organization
 - 3. Preparatory training and air clubs
 - 4. Flying training
 - 5. Operational training
 - 6. Ground personnel training
 - 7. Staff and command schools
 - 8. Foreign missions
- J. LOGISTICS
 - 1. General
 - 2. Sources of supply
 - 3. Supply
 - 4. Maintenance
- K. AIR FACILITIES
 - 1. General
 - 2. Types
 - 3. Characteristics
 - 4. Utilization
 - 5. Extensibility
 - 6. Current capability
 - 7. Distribution
 - 8. Current and projected construction
 - 9. Topography, climatology, and meteorological services
 - 10. Airfield construction materials
 - 11. Other factors
- L. MATERIAL IN ADVANCED STAGES OF DEVELOPMENT
 - 1. Electronics
 - 2. Guided missiles
 - 3. Aircraft, engines, and armament
 - 4. Antiaircraft
- M. PARTICIPATION IN INTERNATIONAL DEFENSE ORGANIZATIONS
- N. PERSONALITIES
 - 1. Biographies
 - 2. List of personalities
- O. COMMENTS ON PRINCIPAL SOURCES

JUNE 1951

A R M E D F O R C E S

~~CONFIDENTIAL~~

PART II - NAVAL AIR ARM

- | | |
|--|---|
| <p>A. GENERAL</p> <ol style="list-style-type: none">1. Tactical capabilities2. Trends3. Marine aviation <p>B. ORGANIZATION</p> <ol style="list-style-type: none">1. High command2. Subordinate commands and units3. Other naval organizations <p>C. AIR ORDER OF BATTLE</p> <p>D. TACTICAL OPERATIONS</p> <ol style="list-style-type: none">1. Antisubmarine warfare (ASW)2. Use of strike and fighter aircraft in a support role | <p>E. PERSONNEL</p> <ol style="list-style-type: none">1. Procurement2. Personnel characteristics and morale3. Uniforms <p>F. RESERVE AND MOBILIZATION SYSTEMS</p> <p>G. TRAINING</p> <p>H. LOGISTICS</p> <p>I. MATERIAL IN ADVANCED STAGES OF DEVELOPMENT</p> <p>J. PERSONALITIES</p> <p>K. COMMENTS ON PRINCIPAL SOURCES</p> |
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OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Section 80. Introduction

A. General

Assess the Armed Forces in general terms, including their relative international position in terms of strength, and state of materiel and training. Continue with a discussion of trends, international commitments, general strategic plans, etc., making the General subsection a balanced synthesis of the General subsections of SECTIONS 81, 82, and 83.

B. Structure of Armed Forces

1. COMPOSITION

Indicate briefly the components of the Armed Forces with their correct nomenclature, including pertinent subordinations and any militarized police forces, etc.

2. TOP CONTROL

Explain the over-all political and military control of the forces, with a simple chart to appear on the bottom half of the first page. Both chart and text should show in their proper relationships: (a) the Chief of State, with his proper military title (Supreme Commander, etc.); (b) any top policy-making body, such as a National Security Council, with its composition and purpose indicated in the text; (c) the Cabinet members or other political echelons through whom the chain of command or administrative control passes; (d) coordinating bodies such as Joint Chiefs of Staff; (e) the highest purely military echelon for control of each component; and (f) on a level at the bottom, the components themselves. Broken lines may be used to show administrative, as distinct from operational control. In a separate paragraph, if pertinent, state how long the present system has been valid and indicate the nature of the change from any recent previous organization. Indicate any important change in the top control structure to be effected in time of war. If the chart includes a Joint General Staff or other important agency which will not be de-

scribed in detail under SECTION 81, 82, or 83, its composition and functions should also be described in a separate paragraph. Explain briefly the methods of coordinating the Armed Forces components and resolving differences among them.

C. Size of Armed Forces

Discuss the relationship of Armed Forces strength to total population, indicating significant trends in total Armed Forces strength and in the proportions among the components. Insert a table showing the total personnel strength and that of each component, with appropriate footnotes to account for changes in nomenclature or subordination, for various dates. As a minimum, the following should be included: 1913, World War I peak (if country was a belligerent), a typical year in the 1920's, the prewar normal (usually 1 July 1937), World War II peak, 1 January of each postwar year, quarterly for the past three or four quarters, and the cut-off date.

D. Position of Armed Forces in the nation

1. LEGAL BASIS

Cite the legal basis (provision of Constitution, basic military law, etc.) for the existence, character, top control, and over-all structure of the Armed Forces. Include dates of pertinent legislation and any significant historical development of the legal status of the military establishment or its components.

2. TRADITIONS

Indicate briefly the warlike, pacifist, militarist, apathetic, or other character of the traditions and proclivities of the nation. Cite past wars (victories and defeats) which have contributed to the present attitude of the people toward war and military or naval affairs. Indicate the prestige, or lack thereof, of the Armed Forces and their components and the existence of any militarist or warlike section of the population. Mention past and present foreign influences, if pertinent.

JUNE 1951

ARMED FORCES

3. POLITICAL INFLUENCE

Discuss the political forces or groups within the country which effectively control the Armed Forces. Indicate whether the country is ruled by a military dictator or a dictatorial minority or whether constitutional guarantees prevent the misuse of military power. Discuss any influence of the military on political affairs. Indicate any factionalism, favoritism, or political intrigue within the military. Indicate the loyalty of the Armed Forces (officers and enlisted personnel) to the regime and any measures taken to insure such loyalty (political commissars, appointment of trusted commanders). Discuss infiltration of subversive influences.

4. FISCAL CONTROL

Describe in a short paragraph the manner in which funds are allocated to the Armed Forces and who controls the pursestrings. Give, in tabular form, actual or estimated budgetary figures, broken down by main components, for several recent, wartime, and prewar fiscal years, indicating the proportion of the total budget allotted to military purposes and any concealed items. (Figures should be given in dollars, with footnotes or a separate column indicating the rate or rates of exchange used.) Discuss briefly trends in the budget and its adequacy.

E. Manpower**1. AVAILABLE MANPOWER FOR ARMED FORCES**

Give statistics on the total number of males by five-year age groups from 15 to 49 as of the first day of the year of publication or a more recent date if important changes have occurred. Indicate how many of the total in each group are regarded as fit for military service. If pertinent, show the depletion of fit manpower by war casualties. Give the size of the annual class reaching military age and the average number of men actually inducted annually.

2. QUALITY OF MANPOWER

Discuss the strengths and weaknesses of the manpower from the military point of view, including such factors as physique, intelligence, education, amenability to hardship, aptitude for the use and care of modern equipment, response to discipline, attitude toward military service, and general morale and loyalty factors. If pertinent, indicate the composition of the military manpower by race, religion, or other categories and the varying suitability of different elements in the population to military service. Differentiate between the manpower as a whole and that section of it which is drawn upon for the Armed Forces.

3. CONSCRIPTION

a. **LEGAL BASIS** — State how long compulsory military service has been on the statute books and to what extent it has been and is now universally, equitably, and efficiently enforced. Cite the basic military service law and executive regulations now in effect. Give the total period of military liability and the prescribed period of service for each component of the Armed Forces or category of personnel. Indicate what proportion of each of the main components of the Armed Forces is obtained by voluntary recruitment. If pertinent, mention any prospects of future change in the system.

b. **GENERAL SYSTEM** — State what agency or agencies administer the conscription system and how it is organized territorially. Indicate the method of designating age classes (i.e., by year of birth or by year of normal induction). Give the age, time of year, and procedure for each step in the operation of the system (initial registration for military service, initial medical examination and classification, selection of men for call-up, consideration of applications for deferment, allocation to main components, actual call-up, actual reporting for duty).

c. **STANDARDS OF FITNESS AND DEFERMENT** — Indicate in general terms the standards of physical fitness applied. List the fitness categories. Cite any actual figures on fitness or acceptance rates which may be available. Indicate the rules applied in granting deferments or exemptions for occupational, educational, or hardship reasons and the number of men affected.

d. **PRESENT STATUS** — Indicate what age class or classes are at present performing compulsory military service and the dates or prospective dates or schedules of call-up and discharge of these and adjacent classes. Give the size of each class affected. Estimate the current composition of the Armed Forces by age classes or age groups.

F. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 81. Ground Forces

A. General

In the form of a brief, over-all appraisal of the ground forces as a fighting machine, cite several of the most salient points of strength and weakness as to personnel, materiel, organization, and efficiency which will be more fully developed in subsequent subsections. Give any indications from past development and performance which will provide the necessary historical perspective, and indicate briefly the long-range and short-range trends. Mention significant foreign influences, and relate the whole discussion to the strategic position, problems, and capacities of the country.

B. Administrative organization

1. ARMY HIGH COMMAND

a. **STRUCTURE** — Explain briefly the over-all organization of the Army, including the main subdivisions of the War Ministry and the chain of command to the territorial headquarters and field forces. Insert one or more charts showing all known or significant High Command agencies in their proper relationships; pay careful attention to exact nomenclature. State what changes in the High Command structure are contemplated in case of war.

b. **FUNCTIONS** — Describe in some detail the internal organization and functioning of each main bureau and staff division shown in the above charts, using appropriate subheadings.

2. TERRITORIAL ORGANIZATION

Describe the division of the country into military districts, regions, corps areas, etc. Explain the functions of such subdivisions (recruitment, local defense, training, replacement, administration, tactical command). List them, showing their headquarters locations and any sub-areas. Include an outline map showing their boundaries and headquarters (or show them on the Order of Battle map under Subsection D below and refer to it).

3. ARMS AND SERVICES

Explain the concepts and nomenclature used in dividing Army personnel and troop units into branches of service. Do not include "services" which are purely High Command agencies. List the arms and services which are represented by actual troop units or by distinctive insignia, giving in parentheses their designations in the language of the country.

C. Tactical organization

1. GENERAL

Describe briefly the over-all organization of the Army into tactical commands and basic tactical units, indicating any contemplated differences between peace and war.

2. HIGHER HEADQUARTERS

Give the actual organization (peace and war) of the higher tactical echelons above division. For each such echelon explain the nomenclature and state the type of operational mission or administrative function for which it is designed. Indicate what units are usually subordinate to it.

3. STAFF ORGANIZATION

Give available data, with a chart if appropriate, on the organization and functioning of field staffs.

4. COMBAT UNITS

Describe, under appropriate subheadings and with accompanying charts, the detailed organization, including known or estimated T/O strengths and allotment of weapons and vehicles, of the various types of divisions and smaller independent combat units. The description of each unit should be carried down to the smallest elements (rifle squad, tank platoon, etc.) Indicate the tactical mission and roles of each unit described. Explain carefully any differences in nomenclature from U.S. usage.

5. SERVICE UNITS

Describe briefly the organization of engineer, signal, supply, and other service units, including one or more charts if needed.

D. Order of battle

1. STRENGTH

a. **PERSONNEL** — Give any available statistics or estimates breaking down the total personnel strength of the ground forces functionally (major components, branches of service, officers and enlisted men, cadres and conscripts, age classes, auxiliaries, colonials, racial or linguistic elements). Figures should be current as of the cut-off date.

b. **UNITS** — Give in tabular form the current number of armies, corps, divisions (by type), and independent smaller combat units (by type).

c. **ARMAMENT** — Give in tabular form estimates of the total number of each type of tank, artillery piece, and mortar prescribed under Tables

JUNE 1951

ARMED FORCES

~~CONFIDENTIAL~~

of Equipment and, in a parallel column, the total number in possession of the country. For each type, indicate in parentheses the country of origin.

2. DISPOSITIONS

a. **GENERAL** — Describe briefly the general disposition of forces at home and abroad, with strength figures by major area, and indicate any significant concentrations.

b. **DETAILED** — For countries which are regularly covered in the Order of Battle Summary, state approximately as follows: "For detailed identifications and locations of units of the Blank Ground Forces see the latest issues of the quarterly Order of Battle Summary of Foreign Ground Forces, published by the Intelligence Division, Office of the AC of S, G-2. Current major dispositions as of (cut-off date) are shown on the map(s) in FIGURE(S) 81-." For all other countries, give a complete Order of Battle.

E. Strategy and defenses

1. STRATEGIC PROBLEMS AND DOCTRINES

Without going into a detailed strategic analysis, indicate briefly the strategic military problems of the nation in the light of position, terrain, economic, political, and other pertinent factors. Discuss the manner in which the leaders of the nation, and specifically the military planners, appear to contemplate meeting these problems. Show how the present organization and disposition of forces and the mobilization plans fit in with these strategic problems and plans. Summarize the concepts of "Principles of War" and the established strategic doctrines of the country, including any pertinent reference to military literature, historical background, past campaigns, and foreign influences.

2. PERMANENT FORTIFICATIONS

a. **GENERAL SYSTEM** — Describe the over-all plan of permanent fortifications as it fits into the strategic concept. Indicate any lessons from the past, current trends, or future plans.

b. **LAND FORTIFICATIONS** — Describe in detail, with subheadings if necessary, the location, purpose, characteristics, and manning of each frontier or internal fortified area, fortified line, or fortress town. Insert a map if appropriate, using standard or special symbols.

c. **COASTAL DEFENSES** — Describe in detail, with subheadings if necessary, the location, purpose characteristics, and manning of coastal fortified areas, harbor defenses, minefields, warning systems, and static coastal batteries. Include data on map of land fortifications, or insert a separate map if necessary.

F. Tactics

1. BASIC TACTICAL DOCTRINES

Discuss the basic tactical doctrines for the ground arms, such as attack, defense, reconnaissance, withdrawal, artillery support, use of cavalry and tanks, use of field fortifications and obstacles, and close combat. Point out any differences in concept or emphasis from U.S. doctrine. Cite the manuals in which such doctrines are formulated, with brief quotations if pertinent. Explain the tactics and technique down to an appropriate level (depending on the size of the Army). Discuss current trends in tactical doctrine and technique.

2. SPECIAL OPERATIONS

Discuss tactical doctrines for special operations such as night fighting, street fighting, winter and arctic warfare, mountain warfare, jungle warfare, desert operations, airborne operations, amphibious operations, and infiltration and partisan methods. Relate the discussion to the existing or contemplated special forms of tactical organization.

G. Personnel

1. RANKS

Describe the rank structure of the Army, indicating any differences from United States practice in the nomenclature, status, and functions of the various general officer, officer, and enlisted ranks. Distinguish between any noncommissioned ranks held by conscripts and those held by career or long-service personnel. Explain any special categories such as warrant officers or military "officials." Indicate the use, if any, of alternate designations of rank for personnel in various branches of service ("gunners" for artillery privates, etc.). Insert a table showing for each rank, starting with the highest, the designation in the language of the country, the literal translation, and the nearest U.S. equivalent.

2. PAY

Describe briefly the system of pay and allowances for the different categories of military personnel, pointing out the differences from U.S. standards both as to the general level (in light of living costs) and as to relative rates for the upper and lower ranks. Insert a fourth column in the table of ranks (referred to above) giving the basic annual rate of pay in dollars, with a footnote to indicate the rate of exchange used.

3. PROCUREMENT AND TERMS OF SERVICE

Describe, under suitable subheadings, the methods of procurement and the terms of service for officers (active and reserve), noncommissioned officers, privates, and any other categories. For privates, refer to the conscription system described in

SECTION 80, E, 3, and describe the additional procedures for voluntary recruitment and reenlistment in the Army. For each category, indicate the machinery in the High Command and throughout the Army for control of personnel (assignment, transfer, efficiency reports, promotion, leave and furlough, hospitalization, discharge).

4. QUALITY FACTORS

Without unduly duplicating the general discussion of national manpower as a whole contained in SECTION 80, E, 2, described the effectiveness of personnel actually serving in the ground forces, emphasizing points of strength and weakness. Include a discussion of morale, discipline, esprit de corps, any traditional rivalries between units or ethnic groups, etc. Indicate specifically the quality of military leadership from the highest to the lowest level.

H. Reserve and mobilization system

1. RESERVE SYSTEM

Give the categories and exact nomenclature of all reserve organizations and reserve groupings, with the functions of each. Explain the system of classification and record-keeping for reserve personnel (officer and enlisted) and the manner in which they are recalled to service for refresher training. Estimate the total number of trained reserves by age groups and other categories and the total additional number of untrained reserves.

2. MOBILIZATION SYSTEM

Describe the system for call-up of reserves, readying of existing units for combat, and activation of new units under general mobilization. Indicate what will be the limiting factors in mobilization for the foreseeable future, such as trained personnel, cadres, or reserves of arms and equipment.

3. MOBILIZATION POTENTIAL

In light of the discussion under Subsections 1 and 2 above, estimate the actual mobilization potential of the ground forces for M plus 30, M plus 180, and other appropriate periods, showing in parallel columns the number of personnel and of divisions and other major units for each such period.

I. Training

1. GENERAL

Characterize the quality and effectiveness of the over-all training system, emphasizing its strengths and weaknesses and current trends. Indicate the influence and effectiveness of any foreign military missions.

2. PRE-INDUCTION TRAINING

Describe the system of pre-induction training or military education, including any government-sponsored or private organizations for encouraging youths to take an interest in military affairs and any program of physical conditioning in the schools under Army sponsorship. Indicate trends.

3. INDIVIDUAL TRAINING

Describe the schedules and methods for basis, advanced, and specialized individual training of enlisted personnel in the principal branches. Describe the organization and functioning of training units, training centers, or similar installations. Explain briefly the replacement training system in time of war. In separate paragraphs, describe the training schedules and methods for NCO and officer candidates and the schooling given officers as their careers progress. Indicate any practice of sending military students abroad.

4. UNIT AND COMBINED TRAINING AND MANEUVERS

Describe the methods of unit training in the various branches, the methods of combined training (infantry-artillery or other combat teams), and the schedule, scope, and character of maneuvers.

5. RESERVE TRAINING

Indicate the schedule and character of refresher training for reservists. Describe the training system for reserve officers (ROTC type, etc.).

6. SCHOOLS AND INSTALLATIONS

a. SYSTEM — Describe the general plan, control, and efficiency of the Army school system and of any other training installations.

b. LOCATION LIST — List all Army schools and other training installations, showing the exact name (English translation followed by vernacular designation in parentheses), location, character, capacity, etc., of each. The list should be arranged according to level.

J. Logistics

1. CLASSIFICATION OF MATERIEL

Indicate the manner in which equipment and supplies are grouped into classes for logistic purposes.

2. PROCUREMENT

Describe the machinery for the planning and control of procurement of the various classes of materiel, including design, placement of orders, acceptance, and testing. Show the role played by any other government agencies (Ministry of Supply, etc.) and indicate to what extent equipment is produced domestically by private industry or government arsenals and to what extent it is imported.

JUNE 1951

ARMED FORCES

~~CONFIDENTIAL~~**3. PEACETIME STORAGE AND ISSUE**

a. **SYSTEM** — Explain the system of storage and issue for various classes of materiel in the zone of the interior.

b. **INSTALLATIONS** — List all known depots and other storage installations for materiel, giving pertinent facts regarding each. Insert a map if warranted.

4. WAR SUPPLY AND MOVEMENT

Explain the machinery for requisition and supply of various classes of materiel in time of war, using charts if necessary. Characterize the efficiency of the supply system. Give any available data on unit movement requirements and unit resupply requirements under varying conditions.

5. MAINTENANCE

Describe the system for maintenance and repair of equipment in the field in peace and in war. Characterize the efficiency.

6. EVACUATION

Explain briefly the system for evacuation of equipment and of personnel, including the handling of captured materiel and of prisoners of war.

K. Materiel**1. ORDNANCE**

For each category of ordnance equipment, arranged under subheadings appropriate to the country, include both a discussion and a table of characteristics. The discussion should in each case describe the general situation of the Army with regard to the quality and quantity of the category of materiel in question; review the indications of the presence, recent acquisition, or contemplated development or purchase of various specific items; evaluate each of the more important items believed to be on hand; and indicate the probable future trend. The table of characteristics should be so designed as to provide, in compact form, the most pertinent comparative data for judging the effectiveness of each item listed. (The table of characteristics may be omitted and any pertinent data incorporated in the text if the subject or the amount of material available does not lend itself to tabular presentation.)

2. SIGNAL

a. **GENERAL** — Characterize the general situation of the Army with regard to quality and quantity of signal equipment.

b. **ET CETERA** — For each category of signal equipment, arranged under subheadings appropriate to the country, give a discussion and, if appropriate, a table of characteristics as indicated under Ordnance above.

3. QUARTERMASTER

a. **UNIFORMS** — Describe briefly the principal types of uniforms as to general appearance, color, material, manner of wearing, headdress, footgear, etc. Include illustrations.

b. **INSIGNIA** — Describe briefly the principal insignia of rank, branch of service, and specialty. Illustrate.

c. **DECORATIONS** — List the principal decorations, indicating the method of awarding them and the manner of wearing. Include illustrations if appropriate.

d. **INDIVIDUAL EQUIPMENT** — Describe briefly the principal types of individual equipment other than uniforms and insignia.

e. **ORGANIZATIONAL EQUIPMENT** — Describe briefly other types of quartermaster equipment, arranged under appropriate subheadings.

4. ENGINEER

a. **GENERAL** — Characterize the general situation of the Army with regard to quality and quantity of engineer materiel.

b. **ET CETERA** — For each major category of engineer equipment, arranged under subheadings appropriate to the country, give a discussion and, if appropriate, a table of characteristics as indicated under Ordnance above.

5. CHEMICAL

a. **GENERAL** — Characterize the general situation of the Army with regard to quality and quantity of chemical materiel.

b. **ET CETERA** — For each major category of chemical materiel, arranged under subheadings appropriate to the country, give a discussion and, if appropriate, a table of characteristics as indicated under Ordnance above.

6. MEDICAL

Characterize the general situation of the Army with regard to quality and quantity of medical equipment, facilities, and supplies. Using appropriate subheadings, describe the principal specific categories or items. Emphasize aspects having a bearing on the combat effectiveness of the Army under varying conditions.

L. Personalities**1. BIOGRAPHICAL SKETCHES**

Give brief sketches of the outstanding personalities in the Army and other ground force organizations, each one to include full name, age, rank, present position, past career, and special aptitudes, attitudes, or traits of character.

~~CONFIDENTIAL~~

PAGE VIII-9

2. LIST OF PERSONALITIES

List all important military personalities (including those covered under 1 above), in alphabetical order, for each of the higher ranks, giving for each individual the full name (with surname in capital letters), age, rank, and present position.

M. Quasi-military and other ground forces

Describe, under suitable subheadings, all ground-force organizations other than the Army which have a military or quasi-military mission connected with national, local, internal, frontier, or colonial security. For each such organization indicate its full name, character, mission, top control, High Command, relationship with the Army in peace and war, administrative or other subdivisions, source and terms of service of personnel, and general disposition. Also include a brief discussion

or characterization of its armament, mobility, training, tactics, and logistics.

N. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 82. Naval Forces**A. General**

Briefly present an appraisal of the naval forces and their combat potential, emphasizing the salient points of strength and weakness as to organization, personnel, materiel, and policy which will be more fully detailed in subsequent subsections. Include features of past development and historical background only as they relate to, or indicate trends in, policy. Comment briefly on ship and personnel strength for significant dates, as appropriate. Mention foreign influence including that of foreign navies on organization, strategy, and other matters as appropriate. Discuss and correlate the naval problems of the country with its strategic position, economic status, political conditions, etc.

B. Organization**1. NAVAL HIGH COMMAND**

a. **STRUCTURE**—Indicate the position and relationship of the Navy with the National Defense Establishment, making appropriate reference to Section 80, A. State briefly the over-all command and administration of the Navy, including the main subdivisions of the Navy Department, or Admiralty, and the chain of command to Naval shore establishments and forces afloat. Insert one or more organization chart(s) depicting the proper position

of the naval bureaus, agencies, and other authorities. Exact nomenclature is desired on diagrams with proper explanation in terms of U.S. equivalents (when possible) in the text.

b. **FUNCTIONS**—Describe as necessary and in detail the more important departmental and staff components of the naval establishment.

2. NAVAL DISTRICTS, ZONES, OR ACTIVITIES

Locate the limits, and describe the command and administration of Naval areas, or activities. Emphasize points of relationship with command, administrative, technical, and financial authorities in the Navy Department, and, if applicable with other service or civilian authorities.

3. NAVAL COMMUNICATIONS NETWORK

Describe the naval communications organization and show naval communications facilities on map or chart. Discuss briefly the dependence on, or use by the Navy of, communications facilities not controlled by the Navy.

4. FORCES AFLOAT

Describe the tactical and administrative organization of the forces afloat to include shipboard organization. Discuss relationship with naval headquarters, other commands, and shore support activities.

JUNE 1951

ARMED FORCES

5. OTHER NAVAL ORGANIZATIONS

Describe other naval or quasi-naval organizations not covered elsewhere such as Coast Artillery, Coast Watchers, Coast Guard, Naval Infantry, Marine Corps, Naval Defense Corps, and amphibious organizations. Show the relationship with Naval Authorities or Activities. If such organizations are not under naval jurisdiction, or if they are more properly included in other NIS Sections, make appropriate reference. Subheadings (5, a, b, c, etc.) may be added according to requirements.

C. Strength and disposition**1. SHIPS**

Describe briefly the current dispositions of ships citing reasons therefor; indicate the proportion of active ships to those laid up, or in reserve. Augment the general remarks by a tabular summary of names, types, and status of combatant and auxiliary naval vessels.

2. PERSONNEL

Describe the general disposition of naval personnel showing the proportion ashore and afloat. When possible augment by tabular summary with a breakdown of strength by rank and rate.

D. Policy and doctrine**1. NAVAL STRATEGIC CONCEPTS**

Discuss the basic political, economic, and military factors which influence naval thinking and strategic concepts. Examine and present the problems confronting the naval staff and administrative authorities in the execution of naval plans and policy. Indicate the capabilities of the Navy to accomplish the mission and objectives with available forces, and bring out any other pertinent factors which relate to the subject.

2. DOCTRINE

Summarize the established naval doctrine of the country with reference as necessary to historical background, influence of foreign elements, past war experience, etc.

3. NAVAL BUDGET AND APPROPRIATIONS

Comment on the adequacy of the Navy appropriations to maintain, operate, train, and develop the Navy.

4. CONSTRUCTION AND DEVELOPMENT PROGRAMS

Discuss the naval building program, and modernization of naval ships with pertinent remarks concerning the estimated dates of completion of such programs. Cite any economic, fiscal, or political factors which affect the program especially those which might cause abandonment or suspension of construction. Describe generally develop-

ments of naval facilities, and equipment. Research and other activities should be included only to the extent that they do not encroach on CHAPTER VII.

5. NAVAL RELATIONSHIPS WITH OTHER COUNTRIES

Discuss naval alliances, agreements, and other factors affecting international naval relationships, particularly emphasizing the influence of such relationships on policy and planning. Discuss fear of or hostility to other national navies with the effect on naval planning.

6. NATIONAL ATTITUDE TOWARD THE NAVY

Describe the national attitude toward the Navy, particularly by organized political parties or groups, and indicate if appropriate, the extent of influence that the Navy has with the current regime.

E. Personnel**1. CORPS AND SERVICES**

Explain the concepts and nomenclature used in dividing naval personnel into branches, with the responsibilities, duties, and limitations of authority of each Branch.

2. RANK AND RATES

Explain the rank and rate structure, and show the nearest equivalent in the U.S. Navy, with appropriate comments of differences that exist. Discuss the command or administrative authority of each rank, and describe any limits of rank of various branches (Example: In the Dutch Navy the highest rank of medical officers is Captain).

3. PERSONNEL PROCUREMENT

Describe in summary form the procurement of officer, volunteer, and conscript personnel. Give qualifications required for officer candidates. If specialist personnel are obtained by special arrangements, so note, or describe.

4. CONDITIONS OF SERVICE

a. OFFICERS — Describe the conditions of service of officers, including promotion and retirement systems. Generally indicate whether service conditions affect morale, lower standards, etc.

b. ENLISTED — Describe the conditions of service of enlisted personnel (volunteer or career), including advancement in rate, and pension plans, and indicate whether the service conditions are conducive to good morale.

c. CONSCRIPT — Describe the conditions of service of enlisted personnel (conscript).

5. NAVAL UNIFORMS AND INSIGNIA

Present, preferably by illustrations: the uniforms and insignia of officers and enlisted personnel, with further descriptions in the text if required.

PAGE VIII-11

F. Reserve and mobilization system**1. SHIPS**

Discuss the recommissioning of ships, inactive or reserve for combat or other war duties with appropriate remarks concerning material condition and other factors which will affect the rate of activation.

2. PERSONNEL

Discuss the naval reserve organization, and the system and schedule of mobilization of reserve and auxiliary personnel. Estimate the total number of reserves by age groups, with appropriate remarks on the effectiveness of the personnel.

3. MERCHANT MARINE AND OTHER AUXILIARY FORCES

Summarize augmentation of the Navy in war by the merchant marine, fishing industry, and other existing marine activities with reference to other NIS Sections as appropriate.

4. ADEQUACY OF MOBILIZATION SYSTEM

Comment on the adequacy of effectiveness of the mobilization system.

G. Training**1. GENERAL**

Discuss the quality and effectiveness of the overall training system of officers and men, emphasizing the strength or weakness of training procedures in theory and practice. Indicate the influence of foreign naval missions on training.

2. TRAINING FACILITIES

List and locate, preferably in tabular form, all establishments devoted to training of naval personnel, together with a brief description of the curriculum.

3. OFFICER TRAINING

- a. BASIC — Describe the basic training of officers.
- b. ADVANCED — Describe the advanced training of officers.
- c. SPECIALIST — Describe the specialist training of officers.

4. ENLISTED TRAINING

- a. BASIC — Describe the basic indoctrination of enlisted men.
- b. SPECIALIST — Describe the specialist training of enlisted men.

5. SHIPBOARD TRAINING

Discuss practical and theoretical training on shipboard (except when a ship is moored school ship utilized for space accommodation).

6. FLEET AND FORCE TRAINING

Give the scope and schedule of fleet and force training, together with pertinent observations on effectiveness.

7. RESERVE TRAINING

Discuss the adequacy, extent, and methods employed in training Reserve Personnel.

H. Logistics**1. PROCUREMENT**

Describe the system of procurement and supply of naval materiel. Show the role played by joint defense activities and other government agencies (Ministry of Supply, etc.). Indicate the dependence on foreign sources for weapons and other materiel, and mention the country of origin of such imports.

2. NEW CONSTRUCTION, REPAIR AND MAINTENANCE

Describe the policy in effect for the construction of naval vessels, and for their repair and maintenance noting the dependence on foreign yards, if applicable. Also show the division of work between naval yards and private yards with remarks concerning efficiency and capabilities. Make reference as applicable to other sections of the NIS (Shipbuilding, etc.).

3. CENTERS OF SUPPLY

List all known depots and other storage installations for materiel, giving pertinent facts regarding each. Insert a map if warranted.

I. Ship design and characteristics**1. DESIGN OF SHIPS**

Discuss naval ship design in relationship to strategic and tactical requirements. Make appropriate comments regarding adequacy or inadequacy of design and construction for operations or employment in certain areas (North Atlantic, Arctic, Tropical, etc.).

2. STRATEGIC CHARACTERISTICS

Present in tabular form the strategic characteristics of both combat and auxiliary vessels.

J. Materiel**1. GENERAL**

Discuss service materiel qualitatively, emphasizing the important characteristics of ordnance, torpedoes, electronics, etc., and explain abbreviations and/or symbols that are not self-explanatory in the tabular summaries. Show dependence on foreign sources for procurement of materiel or components when applicable. Include any aspects which might affect naval operations. Refer to CHAPTER VII for developmental programs of materiel.

JUNE 1951

ARMED FORCES

2. CHARACTERISTICS

a. **GUNS AND AMMUNITION** — Tabular summary of characteristics of guns and ammunition.

b. **TORPEDOES** — Tabular summary of characteristics of torpedoes.

c. **MINES** — Tabular summary of characteristics of mines.

d. **ANTISUBMARINE WEAPONS** — Tabular summary of characteristics of ASW weapons.

e. **ELECTRONIC EQUIPMENT** — Tabular summary of characteristics of electronic equipment.

f. **COMMUNICATIONS EQUIPMENT** — Tabular summary of characteristics of communication equipment.

K. Personalities**1. FLAG AND RANKING OFFICERS**

List of all flag and senior officers of importance with command at time of preparation.

2. BIOGRAPHIES

Give biographical data on selected flag officers or senior officers of importance.

L. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 83. Air Forces

(Including a separate consideration of the Naval Air Arm where applicable)

A. General

Prepare a brief statement outlining the size, composition, and personnel strength of the Air Force. (This should be an over-all appreciation of the salient factors of strategic significance which are included in this section. This paragraph is not intended to be a mere summary of what is included in the following subsections but should be a succinct analysis of the most important elements of the topic as a whole. The producer may include such strength and weakness factors as he may deem appropriate for an adequate presentation. Unnecessary repetition, however, should be avoided as each subject will be covered in detail later in the text.)

State the mission of the Air Force and its ability to fulfill such mission. Cite salient points of strength and weakness.

1. TACTICAL AIR SUPPORT CAPABILITIES

a. **CLOSE TACTICAL AIR SUPPORT*** — State briefly the close tactical air support capabilities of the Air Force to include the maximum number and

* Close Tactical Air Support—Air action against close hostile surface targets which are so close to friendly forces as to require detailed integration of each air mission with the fire and movement of these forces.

types of aircraft that can be assigned initially to close tactical air support combat operations and the number and type of aircraft that can be used on a sustained basis.

b. **GENERAL TACTICAL AIR SUPPORT*** — State briefly the general tactical air support capabilities of the Air Force to include the maximum number and types of aircraft that can be assigned initially to general tactical air support combat operations, the number and type of aircraft that can be used on a sustained basis. Factors affecting serviceability and supply should be indicated briefly under both a. and b.

2. AIR DEFENSE CAPABILITIES

Summarize the defensive capabilities of the Air Force to resist foreign air operations. This summary should include the general types of defensive aircraft, radar, and anti-aircraft or guided missiles.

* General Tactical Air Support—That phase of air tactical air operations against enemy air activities, ground elements, installations and lines of communication in the immediate or projected area, which assists the supported ground force as a whole to gain its objectives but does not require integration with the fire and movement of the supported forces. Reference "Dictionary of United States Military Terms for Joint Usage, First Revision," Joint Chiefs of Staff, Washington 25, D. C., June 1950.

PAGE VIII-13

3. STRATEGIC AIR CAPABILITIES*

State briefly the strategic air capabilities of the Air Force, the maximum number and type of aircraft that can be assigned initially to strategic bombardment and the number that can be used on a sustained basis.

4. AIR FACILITIES

Give an over-all statement evaluating the air facilities of the area, and the chief factors determining their general status.

5. TRENDS

Historical facts relevant to current policies. State the effect foreign air missions have had on the Air Force. State whether the country has a history of offensive or defensive military operations, pointing out the part played by air.

State the effect of current national policies on the composition and strength of the Air Force. State if the Air Force is a political factor in national politics. Cross reference to SECTION 55, D, CHAPTER V.

State combat capabilities with reference to: increase or decrease with the reasons; factors currently being emphasized; the dominant influences causing changes or stagnation in the Air Force; the Air Force's budgetary trend; the current budget and the effect it will have on the Air Force in the years immediately following.

B. Organization**1. HIGH COMMAND**

Explain the relationship of the Air Force to the Armed Forces and indicate the Ministry under which the Air Force functions. Show by diagram and explain the chain of command, structure, and relationship of the general (or air) staff sections, and compare when appropriate to U.S. equivalents.

2. SUBORDINATE COMMANDS AND UNITS

Explain the organizational relationship of major and subordinate commands and units. Show by diagram.

* Strategic Air Warfare—Air combat and supporting operations designed to affect through the systematic application of force to a selected series of *vital targets* the progressive destruction and disintegration of the enemy's war making capacities to a point where he no longer retains the ability or the will to wage war.

Vital targets may include key manufacturing systems, sources of raw material, critical material, stockpiles, power systems, transportation systems, communication facilities, concentration of uncommitted elements of enemy armed forces, key agricultural areas, and other such target systems.

a. **TACTICAL ORGANIZATION*** — Give details of system for organization of Air Force into units through all echelons. Show by diagram. Explain the over-all organization into units from squadron or equivalent up, using exact national nomenclature, together with U. S. equivalent. Give details of the organization and functions of units to include the higher echelons (commands, air divisions, wings, etc.).

b. **AIR COMBAT INTELLIGENCE ORGANIZATION** — Describe the air intelligence organization and explain how combat air intelligence is provided the Air Force.

c. **SUPPLY AND ENGINEERING** — Discuss the over-all service organization of the Air Force, including supply and maintenance, showing method of control through all echelons and territorial divisions. Discuss the method of linking service and supply organization with command, administrative, and tactical organization. Show by diagram.

d. **TRAINING ORGANIZATION OF THE AIR FORCE** — Describe its control and relationship to the over-all air organization. Show by diagram.

e. **ADMINISTRATIVE ORGANIZATION** — Describe the organization for administration (if an organization exists which is an entity apart from the tactical and service units).

C. Air Order of Battle

Provide data on identification, strength, and general disposition of the personnel units and equipment of the Air Force. Include a cross reference to USAF Directorate of Intelligence Air Intelligence Study 172/series.

1. UNIT ORDER OF BATTLE

Include information on each tactical unit as follows:

Type of unit and its mission.

General disposition and location of units and any detachments.

General status training, experience, combat readiness.

2. MEANS OF IDENTIFICATION

System used for numbering units, code numbers, APO numbers and cover names.

Aircraft and equipment markings, insignia, and other identification devices.

3. AIRCRAFT ACQUISITIONS

Discuss source and number of aircraft acquisitions:

Recently acquired.

Planned.

* Tactical unit—An organization of troops, aircraft, or ships which is intended to serve as a single unit in combat. It may include service units required for its direct support.

JUNE 1951

ARMED FORCES

~~CONFIDENTIAL~~**D. Tactical Air****1. CLOSE TACTICAL AIR SUPPORT**

a. **CONCEPT OF UTILIZATION** — Discuss the Air Force's close tactical air support doctrine.

b. **OPERATIONAL CAPABILITIES**

(1) *Organization for tactical air operations* — Describe existing units, such as: tactical air command, tactical air control centers, tactical air control groups, squadrons, and parties. Discuss adequacy of such units to control the existing number of aircraft assigned to close tactical air support. Discuss sufficiency of aircraft to provide adequate air support for the existing ground combat units. Discuss the command and control relationship of close tactical air support to the Army.

(2) *Ground equipment* — Describe mobile radio equipment for controllers, etc.

(3) *Tactical reconnaissance aircraft* — Describe use of tactical reconnaissance aircraft.

2. GENERAL TACTICAL AIR SUPPORT

a. **CONCEPT OF UTILIZATION** — Describe the Air Force's general tactical air support doctrine or theories.

b. **OPERATIONAL CAPABILITIES**

(1) *Organization* — Discuss the Tactical Air Command's (if any) responsibility for general tactical air support.

(2) *Photo and tactical reconnaissance aircraft* — Describe use of photo and tactical reconnaissance aircraft.

3. MILITARY AIR TRANSPORT CAPABILITIES

Describe the air lift capabilities of military air transport in support of tactical air units.

E. Air Defense**1. GENERAL**

Describe essentials of air defense policy; extent of reliance placed on various elements of air defense system; estimate of probable effectiveness of over-all air defense system to resist foreign air operations.

2. ORGANIZATION

Discuss over-all system, designating responsible agencies and their position in the national military structure.

3. WARNING AND INTERCEPT SYSTEMS

a. **GENERAL** — A general statement covering the over-all warning and intercept systems.

b. **SONIC AND VISUAL EARLY WARNING SYSTEMS** — Generally discuss the systems, their organization and capabilities.

c. **ELECTRONIC EARLY WARNING SYSTEM AND GROUND CONTROLLED INTERCEPTION** — Give types, characteristics, and ranges of equipment, and general pattern of geographical disposition. Explain hookup and designate agency operating system. State military effectiveness of systems. Describe how GCI is tied into the early warning systems and fighter airdromes.

d. **AIRBORNE ELECTRONIC EQUIPMENT** — Describe any airborne electronic equipment which the country may have. Show the manner in which this equipment is employed in conjunction with the early warning system.

e. **ELECTRONIC COUNTERMEASURES** — Discuss the electronic countermeasure techniques together with description of the equipment used to implement these techniques.

4. AIRCRAFT DEFENSE

a. **GENERAL** — Discuss the deployment of aircraft defense units and the governing concept (hostile neighbors, probable routes of approach, etc.).

b. **AIRCRAFT** — Discuss the comparative capabilities of the aircraft in operational use which could be used in an interceptor role, citing characteristics and quantities. Illustrate by appropriate chart or tables. Include the following reference in the text: "For additional characteristics and performance information see latest Directorate of Intelligence, USAF, 'Characteristics and Performance Handbook'".

5. ANTIAIRCRAFT ARTILLERY DEFENSE

a. **GENERAL** — Discuss the country's concept of antiaircraft artillery defense (concentration in or near large cities, along borders, airfields etc.). Describe methods of tactical employment of AA weapons including fire and control, layout of batteries and larger units.

b. **ORGANIZATION** — Define the operational and/or administrative control. Show the chain of command. Discuss the specific relationship to other components of the Air Defense. Include organizational charts.

c. **ANTIAIRCRAFT ARTILLERY ORDER OF BATTLE** — Show the strength and general disposition of all antiaircraft artillery forces. (If antiaircraft artillery is under the administrative and operational control of the Army, the U.S. Army Attache reports should be checked; if it is under Air Force operational control, check the Air Attache reports.)

d. **MATERIEL** — Describe the characteristics and effectiveness of guns, ammunition, fuzes, fire control equipment, antiaircraft unguided missiles, guided missiles, searchlights, radar, artificial fog equipment, balloon barrage and other active or passive AA equipment.

PAGE VIII-15

6. PASSIVE AIR DEFENSES

Briefly describe passive air defense measures and indicate the responsible agencies with emphasis on Air Force responsibilities within the Air Force.

F. Strategic Air

Discuss the concept of utilization in air war.

1. BOMBER CAPABILITIES**a. ORGANIZATION OF BOMBER FORCE****b. EFFECTIVENESS OF MATERIEL AND PERSONNEL****2. STRATEGIC RECONNAISSANCE****3. BOMBER ESCORT**

Describe the concept of utilization of escort aircraft for bomber missions.

4. COORDINATION WITH GROUND AND SEA FORCES

Explain how offensive operations of air units are tied in with the operations of the ground and sea forces.

G. Personnel**1. PROCUREMENT**

Discuss the methods by which personnel are procured—by conscription, enlistment, or both. Discuss the system used by the Air Force. If it is a separate system from that of the other Armed Forces, so indicate. If it is a joint Armed Forces system, show how Air Force personnel are allotted.

2. PERSONNEL CHARACTERISTICS AND MORALE

a. ANALYSIS—Give a brief analysis of the qualities, national peculiarities, aptitudes, strong and weak points, etc., of available manpower as related to the requirements of an Air Force.

b. STATE OF MORALE OF AIR FORCE—Discuss state of the morale of the personnel in the Air Force. State the average pilot age. State points of friction within the Air Force which might lead to defection with the use of an appropriate psychological approach, for example, racial and religious differences. Give names of significant Air Force personnel or organizations that have a grievance against the Air Force and the government. Describe the grievance.

c. ESTIMATE—Make an estimate of the susceptibility of the Air Force to psychological warfare and vulnerability to subversion by: 1) the United States, 2) U.S.S.R.

3. UNIFORMS AND INSIGNIA

a. UNIFORMS—Describe briefly the principal types of uniforms as to general appearance, color, material, manner of wearing, etc. Distinguish be-

tween uniforms for officers, for noncommissioned officers, and lower ranks. Photos or sketches in color are desired.

b. INSIGNIA—Describe briefly the usual insignia of rank with U.S. equivalents and branch of service, unit or distinctive insignia, and the principal orders of decorations, together with manner of wearing.

H. Reserve and mobilization systems**1. RESERVE SYSTEM**

Describe the administrative control of the reserve system.

Discuss training required and accomplished.

Categories of reserves. Compare with United States categories of ready reserve and standby reserve.*

Law under which the reserve system operates.

2. MOBILIZATION SYSTEM

Administrative control of the mobilization system. Describe mobilization system to include plans for formation of new units and integration of the reserve and mobilization systems.

Under partial or general mobilization, state whether conscripts and reserve officers and airmen are called or recalled to active duty as individuals or as members of integral units. Compare to USAF Air National Guard and Organized Air Reserve Units.

Discuss law under which mobilization operates.

3. MOBILIZATION POTENTIAL

In view of the above discussion, give an estimate of the actual mobilization potential of the Air Force in event of war.

I. Training**1. GENERAL**

Discuss generally the training program as to whether it meets current requirements of the Air Force, its capability for war time expansion, and the adequacy of training equipment and facilities. Compare the training program with the USAF program or that of another significant country which would provide a better comparison.

* **READY RESERVE**—Those units or members of the reserve components, or both, available for prompt entry into the active Air Force in any expansion of the active armed forces in time of war or in time of national emergency declared by the executive or legislative branch of the government.

STANDBY RESERVE—Those units or members of the reserve components, or both, available for involuntary employment in the expansion of the Air Force in time of a declared state of war or national emergency.

JUNE 1951

ARMED FORCES

~~CONFIDENTIAL~~**2. ORGANIZATION**

Describe the organization responsible for operation of schools, indicating under what staff section it functions and what agency establishes policies.

3. PREPARATORY TRAINING AND AIR CLUBS

Show how air clubs and other quasi-military organizations fit into the training scheme. (Cross reference to CHAPTER III, SECTION 37 for an elaboration of civil and quasi-military flying clubs and organizations.)

4. FLYING TRAINING**a. PILOTS**

1) Outline the method of selection of cadets, to include physical and mental standards. Discuss the military preflight training.

2) Discuss primary training, to include:

Duration in months;
Location of primary training schools;
Syllabus—number, content and length of courses;
Number accepted for training annually, number of failures annually, number qualifying annually for further flight training;
Type aircraft used, training aids;
Number and type of instructors.

3) Describe basic training, to include:

Duration in months;
Location of basic training schools;
Syllabus (number, content, and length of course);
Number accepted for training annually, number of failures annually, number qualifying annually for further flight training;
Type aircraft used, training aids;
Number and type of instructors.

4) Describe advanced training, to include:

Duration in months;
Location of advanced training schools;
Syllabus (number, content and length of courses);
Number accepted for training annually, number of failures annually, number of students graduating annually from flying school with pilot rating.

5) State annual number of foreigners, by nationality, accepted; number trained; and number failed.

6) State annual number of nationals sent abroad for pilot training, annual number failed, annual number trained.

7) Discuss any new or unorthodox training methods or devices.

b. OTHER AIR CREW MEMBERS

1) Describe methods of selection of candidates, to include physical and mental standards.

2) Discuss preflight training.

3) For each type of training such as bombardiers, navigators, gunners, flight engineers, radar observers etc. discuss the following:

Location of school;
Syllabus—length and content of course;
Number and type of instructors;
Number accepted for training annually, number of failures, and number graduating;
Annual number of foreigners, by nationality, trained, and number failed.
Weather as it affects training (a brief statement with reference to SECTION 23, CHAPTER II);
Annual number of nationals sent abroad for training, number trained, and number failed. List by country providing the training. List by specialty;
Any new or unorthodox training methods and devices;
Number of reserve personnel given annual refresher flying training.

5. OPERATIONAL TRAINING

This encompasses all tactical training of personnel and units, flying and non-flying after individuals have been trained in their basic specialties and assigned to units.

a. TRAINING IN THE SQUADRON AND IN SPECIALIZED SCHOOLS — Discuss under the following categories:

GUNNERY:

Air to Air—Fixed and flexible
Air to Ground

ROCKETRY:

Air to Air
Air to Ground

BOMBING:

Horizontal
Dive
Glide
Skip or masthead

NAVIGATION:

Dead reckoning
Celestial
Radio and radar

INSTRUMENT TRAINING:

Ground Controlled Approach (GCA)
Radio Range
Automatic Direction Finder and Manual Direction Finder

NIGHT FLYING**ALTITUDE INDOCTRINATION****COMBAT TACTICS** (Discuss each type of aircraft separately):**Fighter:**

Escort
Defensive and offensive maneuvers

Bomber:

Offensive and defensive maneuvers
Reconnaissance

Troop and cargo carrier:

Aircraft
Rotary wing
Glider

Air-sea rescue:

Fixed wing
Rotary wing

b. MANEUVERS AND WAR GAMES — Discuss success of specific operations. Cite significant lessons learned. Point out deficiencies and/or proficiencies that were apparent. Discuss whether staffs

and commanders demonstrated proper grasp of the problem and implemented proper action. Discuss adequacy of communications, and effectiveness of coordination with ground and sea forces.

6. GROUND PERSONNEL TRAINING

Discuss the training of ground officers and air-men in key specialties such as operations, weather, personnel, engineering (line), engineering (officers), supply, communications, radar, antiaircraft artillery, (if an Air Force responsibility) etc.

7. STAFF AND COMMAND SCHOOLS

Discuss location, type curriculum, effectiveness, selection of students, and length of courses.

8. FOREIGN MISSIONS

Describe each mission with respect to nationality, personnel strength, scope of instruction and doctrines taught, effect upon organization and thinking of Air Force, effect on selection of equipment, political influence, evidence of anti-United States indoctrination, popularity of mission personalities. State whether the mission has been successful. (Actual training accomplished by or under sponsorship of a mission should be discussed in the appropriate numbered paragraphs above.)

J. Logistics

1. GENERAL

Prepare a brief introduction indicating the self-sufficiency of the country with respect to aircraft, aircraft munitions, armament, and aviation fuel. If the nation is not self-sufficient, mention the usual sources of supply. Throughout the subsection, cross reference to CHAPTER VI where appropriate.

2. SOURCES OF SUPPLY

a. AIRCRAFT, AIRCRAFT ENGINES AND PARTS

- (1) *Domestic sources*
- (2) *Foreign sources*

b. RADAR AND ELECTRONICS EQUIPMENT

- (1) *Domestic sources*
- (2) *Foreign sources*

c. ORDNANCE EQUIPMENT (GUNS, AMMUNITION, BOMBS)

- (1) *Domestic sources*
- (2) *Foreign sources*

d. PETROLEUM PRODUCTS — Aviation gasoline, lubricating oils, motor gasoline, jet fuels.

- (1) *Domestic sources*
- (2) *Foreign sources*

3. SUPPLY

a. DISTRIBUTION SYSTEM

- (1) *Transportation*
- (2) *Stock levels, planned and actual*

(3) *Requisitioning*

(4) *Records*

b. ASSESSMENT OF SUPPLY SYSTEM — Discuss with respect to Air Force needs.

4. MAINTENANCE

a. ORGANIZATION AND FUNCTIONS — Provide maintenance flow chart. Describe organizational repair responsibility.

b. ASSESSMENT OF MAINTENANCE SYSTEM — Discuss with respect to Air Force needs.

K. Air facilities

1. GENERAL

Summarize the air facilities situation in the NIS Area, including the present status in both qualitative and quantitative terms, a general history of development to date, and significant factors involved (such as temporary foreign military development of facilities during World War II, peculiar transport aspects of the area, adequacy or inadequacy of other forms of transport, any dominance by military as contrasted with civil air considerations, and special international air route significance, etc.).

Indicate capability and adaptability for heavy bomber, medium bomber, and jet fighter operations. Summarize the current and projected construction programs; include a general statement of suitability of the area for airfield construction. Add remarks regarding any other significant factors which affect the airfield potential, such as topographical, geographical, and climatic conditions. Note that coverage of additional facilities is available in publications issued by Directorate of Intelligence, Headquarters, United States Air Force.

2. TYPES

Cite the total number of air facilities, with a breakdown by type. Use tabulations for detailed information. Use chart where applicable.

3. CHARACTERISTICS

Discuss factors generally characterizing air facilities which exist in the area, including runways, parking, radio aids, lighting, repair and hangar facilities. Refer to photos or diagrams for illustration. Refer to location map. Use chart where applicable.

4. UTILIZATION

Give a brief summary to indicate the use of the system as a whole together with a more detailed discussion of the facilities used by military agencies and by civil agencies. Use chart where applicable.

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5. EXTENSIBILITY

Discuss the extensibility potential of existing air facilities with emphasis upon specific air facilities which are extensible to medium bomber and jet fighter standards. Use chart where applicable.

6. CURRENT CAPABILITY

Analyze the air facilities system to indicate its suitability for combat air operations and capability for airlift activity in support of combat operations. Include photos or schematic diagrams of the facilities available which provide this capability together with appropriate comment as to their individual capabilities.

7. DISTRIBUTION

Describe the distribution pattern for the area pointing out existing concentrations of air facilities and, where applicable, delineate areas where air facilities are inadequate or do not exist. Refer to location maps. Indicate and briefly discuss any major complexes of air facilities around principal urban areas (such as in New York or Washington areas).

8. CURRENT AND PROJECTED CONSTRUCTION

Describe current and projected construction programs in detail, including construction at individual major air facilities to provide information for estimates of future air capabilities. Use chart where applicable.

9. TOPOGRAPHY, CLIMATOLOGY, AND METEOROLOGICAL SERVICES

Discuss topography and climatology, presented from the viewpoint of their effect upon air operations and the development of air facilities in the country. Note that military geography and climate are covered in CHAPTER II. Discuss the nation's meteorological services, and the use made of them by the Air Force.

10. AIRFIELD CONSTRUCTION MATERIALS

Discuss the availability of materials for airfield construction to indicate requirements for importation. Note that mining and production of construction materials is a subject of CHAPTER VI.

11. OTHER FACTORS

Discuss other conditions or situations peculiar to the area which contribute to the present status of the facilities, which affect current suitability for operations, or which might reflect the potential value of the system.

L. Materiel in advanced stages of development

This subsection is to include all weapons and equipment of the Air Force which have been developed beyond the research and experimental stages, but not yet supplied, in quantity, to operational units.

1. ELECTRONICS

Discuss the capabilities of electronics equipment in the advanced stages of development in subject area and briefly compare them with present operational equipment. (Cross reference to SECTION 71, CHAPTER VII, Scientific, will be made when applicable.)

2. GUIDED MISSILES

Discuss the capabilities of guided missiles in the advanced stages of development in subject area, and briefly compare them with present operational missiles. (Cross reference to SECTION 72, CHAPTER VII, Scientific, when applicable.)

3. AIRCRAFT, ENGINES, AND ARMAMENT

Discuss the capabilities of aircraft, engines, and aircraft armament in the advanced stages of development in subject area and briefly compare them with those of present operational equipment. (Cross reference to SECTION 72, CHAPTER VII, Scientific, when applicable.)

4. ANTIAIRCRAFT

Discuss the capabilities of antiaircraft and associated materiel in the advanced stages of development in subject area and compare them with those of present operational equipment. (Cross reference to SECTION 72, CHAPTER VII, Scientific, when applicable.)

M. Participation in international defense organizations

Discuss the participation in such international organizations as NATO to include numbers of units, personnel and logistical support promised or committed. (Cross reference to Subsection C, 1 and C, 2.)

N. Personalities

1. BIOGRAPHICAL SKETCHES

Give brief sketches of the outstanding personalities in the Air Force and Air Force officers in other high governmental organizations.

2. LIST OF PERSONALITIES

List all important military personalities (including those covered under 1 above), in alphabetical order, for each of the higher ranks, giving the full name (with surname in capital letters), age, rank, and present position.

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O. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section and thereby inform the user of the general credibility

to be accorded the intelligence contained in the Section.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets.

PART II - NAVAL AIR ARM

Part II, SECTION 83, is suggested for use by the analysts when writing Air Force's section of those countries which have naval air arms, and to be included only where appropriate.

A. General

Prepare a brief statement outlining the size, composition, and personnel strength of the Naval air arm. (This should be an over-all appreciation of the salient factors of strategic significance which are included in this section. This paragraph is not intended to be a mere summary of what is included in the following subsections but should be a succinct analysis of the most important elements of the topic as a whole. The producer may include such strength and weakness factors as he may deem appropriate for an adequate presentation. Unnecessary repetition, however, should be avoided as each subject will be covered in detail later in the text.)

State the mission of the Naval air arm and its ability to fulfill such mission. Cite salient points of strength and weakness.

1. TACTICAL CAPABILITIES

a. **ANTISUBMARINE WARFARE** — State briefly the antisubmarine warfare capabilities of the Naval air arm to include the maximum number and types of aircraft that can be assigned initially to antisubmarine warfare operations and the number and type of aircraft that can be used on a sustained basis.

b. **NAVAL AIR STRIKES** — As above.

c. **AIR DEFENSE OPERATIONS** — As in (a) above. In addition, include the general types of defensive aircraft, radar, and anti-aircraft guided missiles used.

d. **PATROL AND BOMBARDMENT OPERATIONS** — As in (a) above. In addition, include the maximum number and type of aircraft, radar, and electronic countermeasures.

2. TRENDS

a. **HISTORICAL FACTS RELEVANT TO CURRENT POLICIES** — Describe the effect foreign air missions have had on the Naval air arm. State whether the country has a history of offensive or defensive military operations, and describe the part played by the Naval air arm. (Cross reference to SECTION 83, Part I, A. and SECTION 82, Naval Forces.)

b. **POLITICAL FACTORS** — Discuss the effect of current national policies on the composition and strength of the Naval air arm. State whether the Naval air arm is a political factor in national politics. (Cross reference to SECTION 55, D, CHAPTER V.)

c. **COMBAT CAPABILITIES** — Discuss combat capabilities of Naval air arm, considering the following: increase or decrease in capabilities with the reasons; factors currently being emphasized; the dominant influences causing changes or stagnation in the Naval air arm; the Naval air arm's budgetary trend; the current budget and what effect will it have on the Naval air arm in the years immediately following. (Cross reference budget to SECTION 82, D, Policy and doctrine.)

3. MARINE AVIATION

State whether Naval air includes a Marine aviation component. If so, indicate relationship to the Navy and its place in the organization of defense forces.

B. Organization**1. HIGH COMMAND**

Explain the relationship of the Naval air arm to the Navy, and to the armed forces, and indicate the ministry under which Naval air arm functions. Show by diagram and explain the chain of command, structure, and relationship of the air staff sections, and compare when appropriate to U.S. equivalents. (Cross reference to SECTION 82, D.)

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2. SUBORDINATE COMMANDS AND UNITS

Explain the organizational relationship of major and subordinate commands and units. Show by diagram.

a. FORCES AFLOAT — Describe tactical and administrative organization of forces afloat to include carrier organization. Discuss relationship with naval headquarters, other commands, and shore support activities.

b. FORCES ASHORE — Show how the Naval air arm fits into the Naval district, zones, or activities. (Cross reference to SECTION 82, B.)

c. TRAINING ORGANIZATION OF THE NAVAL AIR ARM — Describe its control and relationship to the over-all air organization. Show by diagram.

3. OTHER NAVAL ORGANIZATIONS

Describe Marine aviation type and show its relationship to Naval aviation and to the Navy. (Cross reference to SECTION 82, B.)

C. Air order of battle

List Air order of battle as in C of SECTION 83, Part I. In addition, list carrier strengths and cross reference to Subsection C of SECTION 82, Strength and disposition.

D. Tactical operations

1. ANTISUBMARINE WARFARE (ASW)

Estimate over-all capabilities of naval air in ASW.

Describe organization of ASW component with naval air.

Discuss effectiveness of material as to concept of utilization and the competence of ASW personnel.

Describe Naval policy and doctrine governing utilization of ASW aircraft. (Cross reference to Subsection D, SECTION 82.)

2. USE OF STRIKE AND FIGHTER AIRCRAFT IN A SUPPORT ROLE

Estimate over-all capabilities of Naval air in a support role.

Describe the organization of strike and fighter aircraft components within the Naval air arm, outlining the effectiveness with respect to the material available, the concept of utilization, and the competence of personnel.

Describe patrol and bombardment aircraft operations. Explain concept of utilization of patrol and bombardment aircraft within the Naval air arm. Describe the operational capabilities of the presently assigned patrol and bombardment aircraft. Describe utilization of photo and/or tactical reconnaissance aircraft. Describe Naval transport units which support any of the tactical operations.

E. Personnel

1. PROCUREMENT

(Cross reference to Subsection E of SECTION 82.)

2. PERSONNEL CHARACTERISTICS AND MORALE

Discuss state of morale of the personnel in the Naval air arm. State average pilot age. Describe points of friction within the Naval air arm which might lead to defection with the use of the appropriate psychological approach. Make an estimate of the susceptibility of the Naval air arm personnel to psychological warfare and vulnerability to subversion by: 1) U.S.; 2) U.S.S.R.

3. UNIFORMS

Cross reference to Subsection E, SECTION 82, and supplement by delineating differences between the Naval officers and enlisted men's uniforms and rank, and those of the members of the Naval air arm.

F. Reserve and mobilization systems

(Cross reference to Subsection F of SECTION 82.)

G. Training

Follow outline of Subsection I of SECTION 83, Part I, and cross reference where applicable to Subsection G, Training, of SECTION 82. In addition, describe carrier training to include landing techniques, plane handline aboard ship, and maneuvers.

H. Logistics

Follow outline under SECTION 83, Part I, J. Logistics, and where applicable cross reference to SECTION 82, H (Logistics) CHAPTER VIII.

I. Materiel in advanced stages of development

If the development of weapons and equipment of the Naval air arm in the country in question is done separately from the development of the same for the Air Force of that country, follow Subsection L of SECTION 83, Part I. Cross reference to Subsection J, Materiel, of SECTION 82.

J. Personalities

Follow outline of Subsection N, Personalities, of SECTION 83, Part I. Cross reference to Subsection K (Personalities) of SECTION 82.

K. Comments on principal sources

Follow outline of Subsection O (Comments on principal sources) of SECTION 83, Part I. When following this outline, note the differences between the information available on Naval air arm and the information available on Air Forces.

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

CHAPTER IX

MAP AND CHART APPRAISAL

Section 90 Introduction
Section 91 Selected Maps, Charts, and Plans
Section 92 Appraisal of Selected Maps, Charts,
and Plans

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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JUNE 1951

Chapter IX- Map and Chart Appraisal

OUTLINE

SECTION 90. INTRODUCTION

- A. General map, chart, and aerial photo coverage
 - 1. Development and organization of mapping activities
 - 2. Geodetic surveys
 - 3. Hydrographic surveys
 - 4. Oceanographic surveys
 - 5. Aerial photography
- B. Major mapping, charting, and aerial photography deficiencies
 - 1. Mapping data
 - 2. Published maps and charts
- C. Programs under way or projected
 - 1. Official mapping
 - 2. Foreign mapping

SECTION 91. SELECTED MAPS, CHARTS, AND PLANS

- A. General
- B. Physical maps, navigation charts, and plans of urban areas
 - 1. General
 - 2. Topographic maps and embossed maps
 - 3. Terrain classification maps
 - 4. Air and air facility maps and charts
 - 5. General, sailing, coasting, and approach charts
 - 6. Nearshore oceanographic charts and maps
 - 7. Climatic maps
 - 8. Plans and maps of urban areas
- C. Maps of transportation and communications
 - 1. General
 - 2. Railroad maps
 - 3. Road maps
 - 4. Waterways charts and maps
 - 5. Maps and charts of ports and harbors
 - 6. Air transport maps
 - 7. Telecommunications and postal maps
 - 8. Pipeline maps

- D. Sociological, political, and economic maps
 - 1. General
 - 2. Sociological maps
 - 3. Political maps
 - 4. Economic maps
- E. Special armed forces maps
 - 1. General
 - 2. Army
 - 3. Navy
 - 4. Air Force
- F. Molded relief models

SECTION 92. APPRAISAL OF SELECTED MAPS, CHARTS, AND PLANS

- A. General
- B. Physical maps, navigation charts, and plans of urban areas
 - 1. Topographic maps
 - 2. Terrain classification maps
 - 3. Air and air facility charts
 - 4. General, sailing, coasting, and approach charts
 - 5. Nearshore oceanographic charts and maps
 - 6. Climatic maps
 - 7. Plans and maps of urban areas
- C. Maps of transportation and communications
 - 1. Railroad maps
 - 2. Road maps
 - 3. Waterways charts and maps
 - 4. Harbor and port charts and maps
 - 5. Air transport maps
 - 6. Telecommunications and postal maps
 - 7. Pipeline maps
- D. Sociological, political, and economic maps
 - 1. Sociological maps
 - 2. Political maps
 - 3. Economic maps
- E. Special armed forces maps
 - 1. Army
 - 2. Navy
 - 3. Air Force
- F. Molded relief models

PAGE IX-1

OUTLINE GUIDE

The outline presented for NIS CHAPTER IX is designed to provide a basis for the appraisal of the mapping program and all types of maps (including embossed maps), charts, and molded relief models that are customarily available for any specific country. Many of the countries included in the NIS schedule, however, have no adequate mapping programs or are not satisfactorily covered by maps of all types. For this reason, it is desirable that the outline be kept flexible enough to be adapted to any unusual situation that authors of CHAPTER IX may encounter. Every heading in the outline, however, must be considered by the authors and be retained without revision unless changes are first approved by the Chapter Coordinator. The two examples given below illustrate the type of changes in the outline that are legitimate: 1) In a few areas (such as Iceland), SECTION 91, D, 3, a, International Boundary Maps, is not applicable. In such a case, the situation should be noted in Section 91, D, 1, General; the international boundary heading would then be omitted and 91, D, 3, b would automatically become 91, D, 3, a. 2) For

many areas, no embossed maps are available. If this is the case, 91, B, 2 becomes topographic maps, and subheadings a and b are omitted. 3) The heading, Obsolete Maps, which does not occur in the outline, may be inserted under any topic if the contributing agency considers it necessary to warn users against specific widely used or apparently authoritative maps.

Maps prepared for other NIS Chapters are to be included in the recommendations and appraisals in CHAPTER IX, SECTIONS 91 and 92, even though the chapters for which the maps were prepared have not yet been published. Historical maps are not to be recommended or evaluated in CHAPTER IX unless they can be justified as contributing in some important manner to an understanding of the current situation in the country under consideration. For example, a map of 1850 international boundaries should be discussed only if current territorial claims are based on 1850 boundaries.

Approved BGN spellings will be used for all place names in CHAPTER IX, when published, unless the names appear in the titles of maps or books cited.

PREFACE TO CHAPTER IX

The preface of CHAPTER IX is a short "Guide to Users", which will be prepared by the Chapter Coordinator. In the Guide, the Coordinator will note:

The structure of CHAPTER IX—its division into:

- a) a general analysis of the mapping situation of a given country, b) recommendations of the best maps available for specific uses, and c) appraisals of all maps recommended.

That only the best maps for various purposes have been included.

That the omission of a topic usually covered by maps indicates that maps on this topic are either unsatisfactory or not available.

That maps prepared for other Chapters of NIS will not be considered in SECTION 91 unless they are also appraised in SECTION 92.

The research cut-off date for each of the contributions to CHAPTER IX.

Other information needed for an understanding of CHAPTER IX for the specific country under consideration but not generally applicable to other countries.

Section 90. Introduction

A. General map, chart, and aerial photo coverage

The five subsections listed below are discussed under this heading. In the first, give briefly the history and current status of official mapping, within the country and note the contributions of foreign countries to the mapping program. In Subsections 2 through 5, the basic geodetic,

hydrographic, oceanographic, and aerial photo data for mapping are to be described. Since these topics are not covered elsewhere in CHAPTER IX, it may be necessary to consider some of them in greater detail than other topics in SECTION 90. SECTION 90, A, 2, Geodetic Surveys, in particular, is basic for estimating the reliability of a large number of the maps mentioned in CHAPTER IX.

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MAP AND CHART APPRAISAL

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SECTION 90, A should be accompanied by illustrative maps showing 1) the extent and type of aerial photo coverage; 2) the geodetic evaluation of selected topographic map coverage on the basis of horizontal and vertical control; and 3) the extent, density, and type of available and existing control.

1. DEVELOPMENT AND ORGANIZATION OF MAPPING ACTIVITIES

a. OFFICIAL MAPPING

b. FOREIGN MAPPING

2. GEODETIC SURVEYS

3. HYDROGRAPHIC SURVEYS

4. OCEANOGRAPHIC SURVEYS

5. AERIAL PHOTOGRAPHY

B. Major mapping, charting, and aerial photo deficiencies

Under heading B, discuss deficiencies in the mapping situation on the basis of mapping data and of published maps.

1. MAPPING DATA

For mapping data, note especially inadequacies in:

a. GEODETIC AND TOPOGRAPHIC SURVEYS

b. HYDROGRAPHIC AND OCEANOGRAPHIC SURVEYS

c. AERIAL PHOTOGRAPHY

2. PUBLISHED MAPS AND CHARTS

For published maps and charts, note inadequacies in 1) topographic maps at various scales, 2) general, sailing, coastal, and approach charts and air charts at various scales, 3) maps and plans of port and air facilities, 4) maps and plans of towns, and 5) special subject maps.

C. Programs under way or projected

State briefly under the headings listed below the salient features of mapping and related programs (including embossed maps and models) being undertaken or planned by local official agencies, by these agencies in cooperation with other governments, and by mapping agencies of other governments. Point out which of the deficiencies noted in SECTION 91, B will be eliminated or reduced.

Include an index map showing the projected coverage of specific mapping programs if significant.

1. OFFICIAL MAPPING

2. FOREIGN MAPPING

Section 91. Selected Maps, Charts, and Plans

SECTION 91 should include recommendations of maps, charts, plans, and models that best illustrate the individual subjects mentioned in the outline. *All recommendations should be justified* on the basis of accuracy, adequacy of detail and presentation, utility, and availability, as indicated in SECTION 92. When appropriate, *include brief statements of major limitations or deficiencies* of all items recommended. Each contributing agency shall number consecutively (beginning with num-

ber 1) all items referred to in its contribution to CHAPTER IX, SECTION 92. Individual appraisals of each map or map series recommended are to be prepared by the responsible agency for inclusion in SECTION 92. See note in SECTION 92 for instructions. In the recommendations, maps are to be identified briefly by content, title, publishing authority, or scale (as well as by item number) when first mentioned in a contribution. Thereafter, they may be identified by the item number alone.

A. General

The Coordinator will prepare a brief introduction to the Section as a whole from contributions supplied by all contributors to SECTION 91.

B. Physical maps, navigation charts, and plans of urban areas

1. GENERAL

Make a general statement comparing physical maps, navigation charts, and plans of urban areas at various scales as to adequacy of content and completeness of areal coverage.

2. TOPOGRAPHIC MAPS AND EMBOSSED MAPS

Material included under this Subsection will vary. If embossed maps are available for a specific area the heading as given above is to be used and is to be subdivided into a. Topographic Maps (which may be discussed as a unit or may be divided into subheadings on the basis of scale) and b. Embossed Maps. If no embossed maps are available, heading B, 2 becomes Topographic Maps.

Recommend the most useful large- and medium-scale maps available and the best English language map series obtainable in quantity in each scale

range. An index or coverage map for topographic map series at selected scales, in accordance with established criteria, shall be prepared to accompany this subsection; if practical, sheet lines should be shown. Recommend also the best available small-scale general terrain maps.

Recommend the best available embossed maps for the region.

3. TERRAIN CLASSIFICATION MAPS

Recommend the best maps under the following topics:

- a. GEOLOGIC MAPS
- b. SOIL CLASSIFICATION MAPS
- c. VEGETATION MAPS
- d. TRAFFICABILITY MAPS
- e. WATER SUPPLY MAPS

4. AIR AND AIR FACILITIES MAPS AND CHARTS

Recommend: 1) the best charts that can be used for air navigation; 2) the best charts showing details of airports and seaplane bases and adjacent facilities, terrain features of landmark value, air distances, and airport locations; and 3) the most useful plotting maps. Include an index map of available aeronautical charts. (Air transport maps are treated under SECTION 91, C, 6.)

5. GENERAL, SAILING, COASTING, AND APPROACH CHARTS

Recommended under this heading: 1) General hydrographic, coastal, and approach charts, and 2) Special interpretive coastal charts.

Under the first group recommend the best hydrographic charts covering the general area, and the best charts for sailing, coasting, and approaching the coast. A chart index or coverage map shall be included in this Subsection.

For the second group, recommend specialized coastal maps such as MAR-GEO or NORMANDY BEACH MAPS. An index or coverage map by area and subject should be included in this Subsection.

6. NEARSHORE OCEANOGRAPHIC CHARTS AND MAPS

Recommend the best available maps and charts showing depth and relief of ocean floor, currents, sea and swell, temperature, distribution and movement of sea ice, salinity, density, bottom sediment, transparency and color, acoustical conditions, diving and submerged operating conditions for submarines, and tidal characteristics and ranges. Appropriate index maps showing areal and subject coverage shall be included as required. If oceanographic charts are inadequate, the subjects to be covered by charts being prepared for the NIS should be noted.

7. CLIMATIC MAPS

Recommend the best available maps showing climatic classification, distribution of climatic elements, extremes of climatic elements and their frequency, dates of freezing and thawing, killing frosts, paths of storms, growing season, and human heat stress. Include flying weather; instrument, closed, and contact conditions; and other combinations of elements such as those necessary for low level visual bombing, incendiary bombing, and chemical warfare. Climatic maps being prepared for NIS, CHAPTER II, should be mentioned if other climatic maps are not satisfactory.

8. PLANS AND MAPS OF URBAN AREAS

Make a general statement on the availability of plans for urban areas, aerial photo mosaics, tourist guides, zoning maps, and local transport maps. Recommend the best plans available for the urban areas designated as "principal urban areas" in NIS CHAPTER II for the area and for other urban areas to be selected and mutually agreed upon by the Chapter Coordinator and the contributor. The final list of plans of urban areas to be discussed in the chapter shall be selected during the early stages of chapter preparation. Include an index map showing the availability of plans for principal urban areas. Indicate the availability of the other selected plans for urban areas in map or list form.

AMS will also supply CIA with a machine record tabulation of all available urban area plans. Depending on the character of the area, these plans may be listed, located on the index map, or be treated in some other appropriate manner by the Coordinator.

C. Maps of transportation and communication

1. GENERAL

Make a general statement of the status of mapping and compare the adequacy of map coverage for the various aspects of transportation and communication. The topics covered in this Subsection are railroads, roads, waterways, ports and harbors, air transport, telecommunications and postal services, and pipelines.

2. RAILROAD MAPS

Recommend the topographic map series that show most completely and accurately the existing railroad lines, and the best maps showing gage, trackage, motive power, capacity, traffic (volume and length of haul), railroad administrative districts and centers, railroad yards, repair shops, bridges and tunnels, and other installations.

JUNE 1951

MAP AND CHART APPRAISAL

3. ROAD MAPS

Recommend the topographic map series that show most completely and accurately the existing highways, and the best special road maps showing jurisdictional classification, type of surface, width, trafficability, amount of traffic, and associated uses.

4. WATERWAYS CHARTS AND MAPS

Recommend the best maps delineating rivers, canals, lakes, and inland harbors. Place special emphasis on navigability, dockage, clearance, and sedimentation. Also recommend maps dealing with channel depths, currents, heads of navigation, navigation seasons, traffic, and river ports (their dockage, loading and unloading facilities, dry docks, and storage).

5. MAPS AND CHARTS OF PORTS AND HARBORS

Recommend the best charts and plans showing details of harbors and ports, and charts and maps showing locations of ports in terms of importance, physical situations, types, facilities, and capacities.

6. AIR TRANSPORT MAPS

Recommend the best maps of commercial air routes and air traffic. (Air and air facilities charts and maps are treated in SECTION 91, B, 4.)

7. TELECOMMUNICATIONS AND POSTAL MAPS

Recommend the most useful detailed and schematic maps showing telegraph and telephone grids and stations; radio broadcasting stations, networks, relay lines and distribution of receiving sets; and postal routes and the location of post offices. Include topographic maps showing telecommunications, postal data, and power lines (to be supplied to Signal Corps by AMS).

8. PIPELINE MAPS

Recommend the most useful, detailed and schematic maps of pipelines, including topographic maps, in the area.

D. Sociological, political, and economic maps**1. GENERAL**

Make a general statement of the adequacy of the map coverage for the various topics included in this Subsection.

2. SOCIOLOGICAL MAPS

Recommend the best coverage for:

a. MAPS OF POPULATION DISTRIBUTION

b. MAPS OF POPULATION COMPOSITION AND CHARACTERISTICS — Cover the composition of the characteristics of the population according to race, nationality, language, and religion.

c. HEALTH MAPS — Include incidence of disease, birth and death rates, health facilities, etc.

3. POLITICAL MAPS

Recommend the best maps and surveys under the following topics:

a. INTERNATIONAL BOUNDARY MAPS

b. INTERNAL BOUNDARIES — Include major and minor civil division boundaries

c. POLITICAL PROBLEM MAPS — Include disputed areas, relative strength of political parties, and results of elections.

4. ECONOMIC MAPS

Recommend the maps that best portray the following kinds of economic data:

a. NATURAL RESOURCES MAPS — Include economic geology, mineral deposits, oil, water resources, fish and animal life.

b. AGRICULTURAL MAPS — Include maps showing agricultural regions land use, soil productivity, and distribution of crops and livestock.

c. INDUSTRIAL DEVELOPMENT MAPS — Include maps giving either by symbol or detail the locations of industries, types of industry and production, mineral and oil exploitations, and fishing and forest industries.

d. COMMERCE AND TRADE MAPS — Include maps showing flow of commerce, centers of trade, exports, and imports.

E. Special armed forces maps**1. GENERAL**

Make a brief statement concerning the types of armed forces maps available and compare the various types as to adequacy. Include only maps of specific and current significance for military operations.

2. ARMY

Recommend the best maps that are specifically designed for the use of land forces.

3. NAVY

Recommend the best charts and maps of special naval significance.

4. AIR FORCE

Recommend the charts and maps designed for use in air operations.

F. Molded relief models

Recommend molded relief models of all types that cover the region or any part of it. State specifically the purpose for which each is designed and the users that it can serve.

Section 92. Appraisal of Selected Maps, Charts, and Plans

INSTRUCTIONS FOR PREPARATION OF CITATIONS AND APPRAISALS IN SUBSECTIONS B, C, D, AND E

Map groups are to be arranged in the order indicated in SECTION 92 of the outline. All map citations and appraisals are to be written according to a standard pattern as indicated below:

Title of map underlined, with English translation in parenthesis without underlining if title is in a foreign language; scale; authority; date; language (if not in English); coordinates (and grid); call number or distribution number. Security classification.

Appraisal—State the main use or uses of the map (if appropriate) and evaluate the data on the basis of accuracy. Comment on the following aspects of the map only if they represent unusual features or points of great weakness, or strength; 1) areal coverage, 2) base data, 3) source material, and 4) cartographic presentation. Other features of the map may also be discussed if they are of outstanding significance.

If a map citation does not fit the standard citation pattern exactly, the contributor may consult the coordinator as to the form to be used, or follow the pattern set for a similar citation in a completed NIS CHAPTER IX. The coordinator may also be consulted concerning the content of an appraisal while the manuscript is in preparation.

The citation and appraisal of an embossed map in SECTION 92 should follow immediately after discussion of the map from which it was made and have the same item number followed by the capital letter A. The citation for the embossed map can, therefore, be abbreviated. It should include: Title underlined; horizontal scale, vertical scale; call number or equivalent. The fact that the map is embossed should be noted immediately after the map title unless this information forms part of the title itself. The appraisal should not repeat information given in the original map appraisal. Among the types of information that might be included are marginal information and additions to or omissions from the original map.

Each molded relief model is given its own item number, as in the case of maps. Citations should be identical to those for maps, except for the inclusion of a vertical scale immediately after the horizontal scale. The appraisal should follow the standard pattern but include also specific evaluation of the model, as distinct from a map.

A. General

Explain that the following maps have all been cited in SECTION 91 and that they are arranged by subject groups, not in order of importance.

B. Physical maps, navigation charts, and plans of urban areas

1. TOPOGRAPHIC MAPS
2. TERRAIN CLASSIFICATION MAPS
3. AIR AND AIR FACILITY CHARTS
4. GENERAL, SAILING, COASTING AND APPROACH CHARTS
5. NEARSHORE OCEANOGRAPHIC CHARTS AND MAPS
6. CLIMATIC MAPS
7. PLANS AND MAPS OF URBAN AREAS

C. Maps of transportation and communications

1. RAILROAD MAPS
2. ROAD MAPS
3. WATERWAYS CHARTS AND MAPS
4. HARBOR AND PORT CHARTS AND MAPS
5. AIR TRANSPORT MAPS
6. TELECOMMUNICATIONS AND POSTAL MAPS
7. PIPELINE MAPS

D. Sociological, political, and economic maps

1. SOCIOLOGICAL MAPS
2. POLITICAL MAPS
3. ECONOMIC MAPS

E. Special armed forces maps

1. ARMY
2. NAVY
3. AIR FORCE

F. Molded relief models

Subsections B, C, D, E, and F consist exclusively of appraisals, which will follow the pattern described above. In Subsections B, 4 (General, sailing, coasting, and approach charts) and B, 7 (Plans and maps of towns), the appraisals may be presented in table form. Subsections C, D, and E may be subdivided as in SECTION 91, if the number of maps justifies the breakdown.

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

SUPPLEMENT I

PORTS AND NAVAL FACILITIES

- Section 1 Introduction
- Section 2 Principal Ports
- Section 3 Secondary Ports
- Section 4 Minor Ports and Landings
- Section 5 Comments on Principal Sources

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Supplement I - Ports and Naval Facilities

OUTLINE

- | | |
|---|---|
| SECTION 1. INTRODUCTION | SECTION 2. PRINCIPAL PORTS |
| A. List of ports and naval facilities | A-Z. Name of port |
| B. Classification of ports and naval facilities | 1. Introduction |
| C. Berthing estimates | 2. Harbor |
| 1. Free-swinging anchorage berths | 3. Terminal facilities |
| 2. Alongside berths | 4. Storage facilities |
| D. Estimated military port capacity | 5. Clearance facilities |
| E. Explanatory notes | 6. Port capacity |
| 1. Units of measure | 7. Supplies |
| 2. Cross-references | 8. Repair facilities |
| 3. General | 9. Port administration |
| F. Glossary | 10. Trade of port |
| | 11. Planned development and improvements |
| | 12. Naval facilities |
| | SECTION 3. SECONDARY PORTS |
| | SECTION 4. MINOR PORTS AND LANDINGS |
| | SECTION 5. COMMENTS ON PRINCIPAL SOURCES |

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Note for publication: Information in this Supplement is presented as a detailed treatment of individual ports which are covered in a general manner in SECTION 35. The NIS areal summary of ports in SECTION 35 will not be duplicated in this Supplement.

Section 1. Introduction

A. List of ports and naval facilities

Alphabetically list all ports indicating name, coordinates, category.

List naval bases indicating name, coordinates, category.

B. Classification of ports and naval facilities

Basis of division into categories of principal ports, secondary ports, and minor ports (division is based on relative port capabilities).

System used in classifying naval facilities.

C. Berthing estimates

1. FREE-SWINGING ANCHORAGE BERTHS

Standard classification system adopted for anchorage berths; add notes as required on its use in Supplement.

Class I, min. dimensions—800 yd diameter, 38 ft depth; type vessel—capital naval ship, large passenger ship.

Class II, min. dimensions—500 yd diameter, 30 ft depth; type vessel—standard oceangoing cargo vessel.

Class III, min. dimensions—300 yd diameter, 20 ft depth; type vessel—destroyer, small cargo vessel.

2. ALONGSIDE BERTHS

Standard classification system adopted for alongside berths; add notes as required on its use in Supplement. In multiple berthing, due allowance should be made for adequate clearance between ships.

CLASS OF BERTH	SIZE VESSEL Length	ACCOMMODATED Draft	EQUIVALENT VESSEL TYPE
<i>ft</i>	<i>ft</i>		
A	500	30	C3
B	460	24-28	Liberty, Victory, C2
C	350	18-21	C1-M-AV1
D	250	16	Standard
E	200	12	Coaster Small Coaster

NOTE This classification of alongside berths is not applicable to naval and tanker accommodations.

D. Estimated military port capacity

A standard formula adopted for determination of an estimated military port capacity has been based on the following conditions or factors:

- 1) Capacity is from ship to shore and transfer of cargo from the immediate working area.
- 2) Naval wharves and piers, bunkering facilities, and petroleum piers generally are disregarded in evaluation of available berthing facilities for general cargo.
- 3) Unloading of ships is by ship's gear only.
- 4) Evaluation of alongside vessel accommodation is based on the following vessel types:

a. Liberty-Victory-C2 (Class "B" berth)	460' minimum length 24'-28' draft
b. C1-M-AV1 (Class "C" berth)	350' minimum length 18'-21' draft
c. Lighters	6' minimum draft

5) Tonnage unloaded by vessels alongside (L/tons per 20 hour day):

a. Liberty-Victory-C2	600 tons
b. C1-M-AV1	400 tons

6) Vessels worked in the stream—free-swinging anchorage berth with minimum diameter of 1,500' and 30' minimum depth (Class II anchorage berth). Vessel discharge calculated on Liberty-Victory-C2 type only (L/tons per 20 hour day) 500. (Where lighterage docking space is the limiting factor, the figure of 150 tons per day per 100 linear feet of dock is used.)

7) Adequate labor and dock-working equipment assumed.

8) Adequate supply of lighters assumed.

9) Capacity estimates include all allowances and adjustments necessary to compensate for the presence of adverse factors such as deteriorated facilities, poor layout of working space and other peculiarities which might tend to alter or affect the operation of the port at the estimated capacity.

NOTE The foregoing conditions or factors should be published in each SUPPLEMENT I.

E. Explanatory notes

1. UNITS OF MEASURE

Statement concerning use.

2. CROSS-REFERENCES

Point out topics which receive additional treatment in other sections of NIS. Provide appropriate cross-reference for each by subject.

3. GENERAL

Other notes and general reference data as appropriate.

F. Glossary

List, with English equivalents, common port and harbor terminology in language of area.

JUNE 1951

PORTS AND NAVAL FACILITIES

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Section 2. Principal Ports

A-Z. Name of port

Coordinates (H.O. Chart No.)

1. INTRODUCTION

General summary including such features as:

Location.

Importance (brief discussion on city and port as unit—population, industries, hinterland and trade).

Nature of port (physical situation).

Brief description and evaluation of port facilities.

Summary of normal port operations.

Discuss briefly plans for possible new works—expansion of present facilities, or reconstruction programs.

Summary of naval installations.

2. HARBOR

Summary of harbor (as differentiated from the port):

Physical situation—type, position, size, shape, and layout of harbor, shoreline, beaches, and adjacent terrain (with mention of town and port site).

Shelter—natural or artificial (describe position, dimensions, and construction of breakwaters and other protective works).

Wet docks and semi-tidal basins, if present—construction, layout, dimensions; details of dock pumps, gates, and machinery; operations data.

Depths—average depths, fairways, liability to silting and details of dredging normally required, details of underwater obstructions such as shoals, wrecks, cables, fixed fishing gear, spoil grounds.

Bridges—structures spanning portions of harbor and regarded as obstructions to shipping (type and clearance, vertical and horizontal).

a. APPROACH

(1) General approach

(2) *Entrance channel* — Discuss such factors as:

Length and configuration.

Governing width and depth.

Maximum size vessel which can enter.

Liability to silting and details of dredging normally required.

Aids to navigation (summary evaluation only).

Pilotage (necessity for, availability and quality of local pilots).

b. *ANCHORAGE* — Indicate the location of anchorages (areas assigned to or suitable for anchorage) and cover each in terms of:

Depths.

Bottom sediments (evaluation of holding qualities).

Evaluation of each anchorage area in terms of protection from sea and weather.

Number and location of free-swinging anchorage berths by classes.

Fixed moorings (location and layout; number, types, sizes, and capacities of berths).

c. HYDROGRAPHIC CONDITIONS — Include:

Tidal ranges and interval.

Currents.

Sea and swell.

Ice.

Indicate adverse conditions that may affect ship handling and port operations.

d. *LOCAL WEATHER CONDITIONS* — Summary of weather conditions, particularly as they affect ship handling and port operations.

3. TERMINAL FACILITIES

a. PIERS, WHARVES, AND LANDINGS

(1) *General summary covering* — Wharf layout and construction—layout of facilities in port, classification of types of wharves and landings and functional grouping.

Adequacy of waterfront facilities for rapid and efficient cargo transfer; general methods of operation, i.e., movement and berthing of vessels, cargo discharge and transit, etc.

Small craft landings—adjacent hards, bulkheads, steps, stages, and beaches usable by amphibious lighters, landing craft, and boats.

(2) *Details of principal piers and wharves* — Tabulate details of each wharf unit:

Name

Location (include reference number on port plan together with local designation if available).

Use

Type and construction

Dimensions: (feet)

Length

Width

Depths alongside (MLW)

Usable berthing space

Width of apron

Height of deck above (MHW)

Load capacity of deck, in pounds per sq ft)

Berthing capacity (No. and class of berth)

Transit sheds:

Type of construction

Dimensions

Number of floors

Height between floors

Total floor area

Mechanical handling facilities (cranes, conveyors, etc.

Railroad facilities and connections

Road facilities and connections

Utilities

Water

Electricity

Remarks (data not mentioned above; e.g., unusual berthing method, condition of wharf, etc.)

PAGE I-3

b. MECHANICAL HANDLING FACILITIES

(1) *Cranes* — Summary statement of hoisting and equipment available in port, ashore and afloat, indicating general types, uses, capacities and characteristics. Tabulate details.

(2) *Stevedore gear* — Availability of stevedore gear—slings, pallets, jitneys, wharf trucks, carriers, portable conveyors, etc.

(3) *Specialized handling equipment*—Special cargo handling machinery such as coal and bulk ore unloaders, marine legs, grain spouts and conveyors, etc.

c. HARBOR CRAFT — Tabulate numbers and details of service craft located in port:

Tugs (size, H.P., use)
Lighters (type capacity, use)
Bunkering craft (type, capacity, pumping equipment, rate of handling)
Dredgers (type, capacity in depth and cu. yds. per hour)
Miscellaneous (fireboats, icebreakers, salvage craft, pile drivers, ferries, etc.)

4. STORAGE FACILITIES

a. COVERED STORAGE

(1) Warehouses

(a) SUMMARY OF ALL WAREHOUSES AND OTHER STRUCTURES SUITABLE FOR USE IN CONNECTION WITH PORT OPERATIONS — Include total capacity by types and indicate adequacy of facilities for normal port operations, and capacity available in excess of local requirements.

(b) DETAILS OF WAREHOUSES — Tabulate details of each installation:

Location, operator
Commodities stored
Type of construction
Dimensions
Number of floors
Height between floors
Total floor area (sq ft)
Total capacity (cu ft or measurement tons)
Rail and road connection
Fire protection
Special equipment (overhead cranes, monorail systems, etc.)

(2) Cold storage facilities

(a) SUMMARY OF FACILITIES — Including total capacity, adequacy for normal port operations, and capacity available in excess of local requirements.

(b) DETAILS OF COLD STORAGE FACILITIES — Tabulation of details of each installation:

Location, operator
Commodities stored
Type of construction
Type of equipment
Daily ice capacity
Storage capacity in cu. ft. or measurement tons (differentiate by controlling temperatures)

(3) Bulk grain storage facilities

(a) SUMMARY OF FACILITIES INCLUDING TOTAL CAPACITY

(b) DETAILS OF EACH INSTALLATION —

Location, operator
Type of construction
Total storage capacity
Loading berth:
Berthing space and depths alongside
Capacity by vessel type
Normal handling capacity per hour
Car to elevator
Elevator to car
Elevator to ship
Ship to elevator
Rail and road connections

b. OPEN STORAGE SPACE — Location of areas suitable for open storage; indicate size, rail and road connections, approximate capacity, and distance from ship berths.

5. CLEARANCE FACILITIES

a. RAIL

(1) *Lines clearing port* — Summary of lines clearing port mentioning connecting points, number of tracks, and gage.

(2) *Rail facilities in port* — General summary covering: Trackage in water-front area; and Classification yards (location, number of sidings, car capacity).

b. ROAD

(1) *Roads and highways clearing port* — Summary of routes clearing port mentioning connecting points, type of construction, widths, condition.

(2) *Streets and roadways in town and port area* — General analysis of adequacy in relation to port operations.

c. WATER — Summary of normal inland waterway routes of clearance, including connecting points, numbers, types and capacities of craft in service.

d. PIPELINES — Summary of pipelines clearing port.

6. PORT CAPACITY

a. PORT OPERATING DATA

(1) *Cargo* — Show the average monthly tonnage of cargo normally handled at port (indicating types of cargo and type of movement—discharge or loading); prevailing methods of cargo handling and transfer, indicating any bottlenecks or limiting factors, actual or potential.

(2) *Port labor supply* — Discuss from the standpoint of organization, availability, efficiency, morale, etc.

b. ESTIMATED MILITARY PORT CAPACITY — Estimate is based on standard formula. Point out special conditions or factors affecting estimate which may not be fully covered by the basic assumptions.

7. SUPPLIES

a. PETROLEUM — Summarize for each of the various types of petroleum products, the normal capacity of storage installations in the port, normal stocks maintained and storage capacities and stocks in excess of normal requirements.

Discuss normal methods of supplying bunkers to ships.

Tabulate details of each petroleum terminal installation (with indication of owner, operator, and location):

STORAGE FACILITIES:

Tankage (type, dimensions, and capacity of each tank; aggregate capacity of tanks by product).

Covered storage (type, dimensions, and use of each).

OILING BERTHS:

Name, location, and capacity of berth serving installation; size, use, and capacity of each pipeline; cross-reference to A, 3, a (2) for details.

ANCILLARY FACILITIES:

Details of fire protection system, filling plant, pumping plant, etc.

Bunkering—General analysis of availability of bunkers and methods of supplying to ships.

b. COAL — Tabulate details of each storage and bunkering installation:

STORAGE FACILITIES:

Owner and operator

Location

Capacity

SUPPLY:

Sources

Grades in stock

Normal supplies

BUNKERING FACILITIES: Cross-reference to A, 3, a, (2)

c. WATER — Discuss availability of water supply to ships (at wharves and by lighter); adequacy of supply; quality of water; rates of supply to ships.

d. POWER — General availability of electric power and lighting in port and water-front area (with indication of source and characteristics of current).

e. PROVISIONS AND CHANDLERY — Discuss availability of.

8. REPAIR FACILITIES

a. GENERAL — Summarize available drydocking and repair facilities and capabilities of port (include naval dockyards).

b. PRINCIPAL REPAIR YARDS — Discuss each yard as an integrated unit; include naval dockyards.

(1) *Name of yard* — Summary covering location, layout, activities, and capabilities.

(a) DOCKING INSTALLATIONS — Summary of drydocks and marine railways; cross-reference to Subsection 8, e, for details.

(b) FITTING-OUT AND REPAIR BERTHS — Summary of wharf facilities; cross-reference to Piers, Wharves, and Landings for details.

(c) SHOPS — For each shop give size, construction, layout; itemize each major piece of equipment together with its conditions and capability:

Structural shops

Engineering shops

Electrical and instrument shops

Miscellaneous shops

(d) HEAVY-LIFT EQUIPMENT — Summary of craneage; cross-reference to Mechanical Handling Facilities for details.

(e) UTILITIES — Summary of availability, adequacy, characteristics, and distribution of: Electric power, steam, compressed air and industrial gases, and water.

(f) PERSONNEL — Number, categories, and quality of employees.

c. MINOR REPAIR YARDS — Details of small craft building and repair yards, including installations, normal operations, and capabilities.

d. AUXILIARY REPAIR FACILITIES — Enterprises lacking drydocking equipment but specializing in or capable of marine repairs in some degree; e.g., machine shops and foundries, railroad shops, salvage firms.

Details of installations, normal operations, and capabilities.

e. DETAILS OF DRYDOCKING INSTALLATIONS — Tabulate details of all significant drydocking installations in port.

GRAVING DOCKS (for each):

Name

Location

Construction

Dimensions (feet)

Entrance:

Width at coping

Width at mean high water level

Depth over sill (MHW)

Body of dock:

Length on top

Length on floor

Depth over keel blocks (MHW)

Gate (type and mechanism)

Pumping plant; rates of dewatering and flooding

Availability of heavy lift facilities

GRAVING DOCKS (for each) (*Continued*):

Availability of water, steam, electricity, compressed air, etc.

Capacity of dock (vessel type and size)

Age and condition of dock

FLOATING DRYDOCKS (for each):

Name

Location

Construction

Dimensions (feet)

Length:

Over-all

On keel blocks (max)

Width, over-all

Width between side walls

Maximum depth: Over keel blocks

Maximum draft of dock

Pumping plant and rates

Availability of heavy lift facilities

Availability of water, steam, electricity, compressed air, etc.

Lifting capacity (weight in long tons)

Capacity of dock (vessel type and size)

Age and condition of dock

MARINE RAILWAYS:

Name

Location

Type and construction

Dimensions (feet)

Cradle

Length

Width

Depth over blocks, outboard position (MHW)

Forward

Aft

Declivity

Hauling machinery

Transversing arrangements

Hauling capacity (weight in long tons)

Capacity by vessel type and size

9. PORT ADMINISTRATION

a. ORGANIZATION — Analyze pattern of ownership, authority, and operation of port. Discuss official services such as quarantine, customs, immigration, police, etc.; port security organization; free-port organization and facilities.

b. PORT REGULATIONS — Summarize the most important elements of the prevailing port regulations and practices.

10. TRADE OF PORT

a. SHIPPING — Statistics on volume of shipping (number of vessels by size, type, trade, and flag calling at port over monthly or yearly periods).

b. COMMERCE — Present in tabular form:

List by commodity and amount, and breakdown by direction—foreign and domestic.

Ratio of port's trade to national total. Use data for five or so representative years.

11. PLANNED DEVELOPMENT AND IMPROVEMENTS

Discuss in detail where appropriate plans for new harbor works or expansion of port facilities.

12. NAVAL FACILITIES

a. SUMMARY — General summary covering: Location and importance; type of base or activity (naval base, station, operating base, facility, etc.); organization, layout, and component functions; vessels based at, or using, facilities.

b. BASE COMPONENTS — Details of each element or activity of base in terms of the following components; omit topics and headings which are not applicable; identify each building and installation on map.

(1) Harbor — Cover in such manner as is appropriate but cross-reference to principal treatment under Harbor.

(2) Landing facilities — Summarize and cross-reference to Terminal Facilities.

(3) Shipbuilding and repair component — Summarize and cross-reference to principal treatment under Repair Facilities.

(4) Ordnance component

(a) MANUFACTURING FACILITIES — Discuss type of manufacture and give details of plant, including: current activity and capabilities; identification of buildings and facilities; dimensions, construction, layout, and equipment of each building.

(b) ASSEMBLY, OVERHAUL, AND MAINTENANCE FACILITIES — Discuss types of operations performed and give details of plant including: current activity and capabilities; identification of buildings and facilities; dimensions, construction, layout and equipment of each building.

(c) STORAGE FACILITIES — Details of type, construction, dimensions, capacity, and use of each building or installation.

(5) Supply component

(a) MATERIAL STORAGE AND SUPPLY — Analyze activities and cover details of type, construction, dimensions, capacity, equipment, and use of each building or installation.

(b) FUEL STORAGE AND SUPPLY — Summarize and cross-reference to principal treatment under Petroleum Supplies.

(6) Communications component — General analysis of organization and functions of communications activities. For each facility or installation—radio station, relay station, message center, etc.—cover such details as type, construction, dimensions, layout, and equipment.

(7) Training component — General analysis of mission, organization, and functions of each training activity; detailed description of facilities including school buildings and quarters, instruction shops and practice equipment (diving chambers, etc.).

(8) *Medical component* — Detailed description of all medical facilities including hospitals, dispensaries, laboratories, clinics.

(9) *Administrative component*

Table of organization of base as a whole.

Table of organization of each component activity.

(10) *Miscellaneous components* — Detailed description of all special or miscellaneous activities not included in above components.

c. *BASE UTILITIES* — General services and utilities for base as a whole; identify each building and installation on map.

(1) *Housing facilities* — Detailed description of barracks, quarters, and ancillary installations.

(2) *Transportation facilities*

(a) *CLEARANCE* — Rail, road, and water transportation facilities clearing base.

(b) *FACILITIES WITHIN BASE* — Layout and construction of streets and roadways; details of vehicles and vehicle repair shops; layout of railroad trackage; details of railroad equipment.

(3) *Base communications* — Details of all internal communications facilities.

(4) *Electric power and lighting* — Type, capacity, and output of power plants; details of generating equipment and transformers; characteristics of current as produced and distributed.

(5) *Water supply* — Source, quantity, and quality of supply; details of transmission, purification, storage, and distribution.

(6) *Fire protection* — Details of equipment and alarm system; fire mains and pressures.

(7) *Recreation facilities*

(8) *Disciplinary facilities*

d. *BASE DEFENSES*

(1) *Harbor defenses*

(a) *ENTRANCE CONTROL POST* — Details of command post for coordination and operation of military elements of the harbor defense system.

(b) *DETECTION UNITS* — Details of magnetic loops, sonobuoys, cable-connected hydrophones, and other devices for the detection of approaching submarine and surface craft.

(c) *NETS AND BOOMS* — Location, number, layout, types, and construction of units to close harbor against submarine, torpedo, or motor torpedo boat attack.

(d) *MINING* — Location and details of defensive mining in harbor approaches and entrance.

(e) *PATROL OPERATIONS* — Details of patrol activity in harbor and its approaches; identification and functions of vessels assigned to harbor defense and patrol duties.

(2) *Antiaircraft defense* — Location, number, type of guns, emplacements, command posts, range finders, radar, etc.

(3) *Chemical warfare defense* — Procedures and equipment for individual and collective protection and decontamination.

(4) *Protective construction and concealment* — Dispersal of base units; sandbagging, concrete splinter-proof construction; subterranean shelters, depots, and communication centers; camouflage, natural cover, decoys, and smoke screens.

(5) *Internal security* — Sentries, guardhouses, barriers, watch towers, and inspection procedure to prevent sabotage and unauthorized entry.

Section 3. Secondary Ports

If information is available, use all applicable headings shown under SECTION 2, Principal Ports. Eliminate or combine headings where necessary or desirable.

Section 4. Minor Ports and Landings

Tabulate or discuss significant details of smaller ports not treated above (ports relatively unimportant in extent of trade and port facilities, but usable by ships).

Section 5. Comments on Principal Sources

This Section is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Supplement and thereby inform the user of the general credibility to be accorded the intelligence contained in the Supplement.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

GRAPHIC MATERIAL

This Supplement should be accompanied by the following graphic material:

Location map — General map of area showing location of all ports and naval facilities.

Port plans — An accurate, large-scale plan, showing in detail:

Wharves
Transit sheds (individual buildings)
Warehouses (individual buildings)
Railroad spurs and sidings
Street pattern
Layout of repair yards
Layout of important industries and other installations

Soundings in feet
Mooring buoys
Navigational aids
Layout of naval bases and installations

Aerial photographs (indicate date and direction)—Vertical mosaic of port or base

Selected obliques; large-scale verticals of important installations.

Ground photographs—Selected views of port facilities and operations. Include detailed captions pointing out important features, direction of view, and date of photograph.

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

SUPPLEMENT II

AIR FACILITIES

CENTRAL INTELLIGENCE AGENCY
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Supplement II - Air Facilities

The air facilities requirements of the NIS normally are met by Sections 83, K and 37, as supplemented by periodic publications issued by the United States Air Force. A Supplement II is provided for those instances where there is not sufficient other material to warrant a Section 37 or Section 83, or where there is more material available than is required for Section 37 or 83, K.

The Supplement II requirements for description of individual air facilities are indicated by the outline below.

Note for publication: Information in this Supplement is presented as a detailed treatment of air facilities which are covered in a general manner in SECTIONS 37 and 83.

OUTLINE

Air facilities list to contain the following:

Name and alternate names

Classification

Map reference

Altitude and variation

Location and landmarks

Landing area

AIRFIELDS—dimensions of field, runways, taxiways, and parking areas, with surface construction, condition, and load capacity (indicate in lb or type aircraft) of each.

SEAPLANE STATIONS—dimensions of alighting and mooring areas, minimum depth, shelter and surface condition, tidal range and currents, buoys and markers.

Extensibility

Obstructions

Facilities available, to include radio aids, lighting, fuel, oil, hangars, repairs, accommodations, communications, and access by road, rail, and water. In addition for Seaplane Stations give ramps and cranes, docks and floats, boats and tugs.

Weather service

Operators

Users

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PAGE II-1

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

SUPPLEMENT III

TELECOMMUNICATIONS

- Section 1. Telephone
- Section 2. Telegraph
- Section 3. Radio
- Section 4. Submarine Cables
- Section 5. Comments on Principal Sources

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Supplement III- Telecommunications

OUTLINE

SECTION 1. TELEPHONE

- A. Outside plant
 - 1. Networks and systems
 - 2. Line construction
 - 3. Cables and wire
 - 4. Accessibility of routes
- B. Inside plant
- C. Repair facilities

SECTION 2. TELEGRAPH

SECTION 3. RADIO

- A. Communications
 - 1. Facilities
 - 2. Repair facilities
- B. Broadcasting (including FM and television)
 - 1. Facilities
 - 2. Repair facilities

SECTION 4. SUBMARINE CABLES

- A. Facilities
- B. Repair facilities

SECTION 5. COMMENTS ON PRINCIPAL SOURCES

SUPPLEMENT III contains technical reference data on telecommunications equipment and systems. An analysis and interpretation of strategic economic, administrative aspects and service potentialities of telecommunications will be found in SECTION 38, CHAPTER III.

Other specialized phases of telecommunications are treated elsewhere in the NIS:

Effect upon telecommunications, CHAPTER II
Manufactures, SECTION 64, CHAPTER VI
Electronics, SECTION 71, CHAPTER VII
Military, SECTION 81, CHAPTER VIII
Telecom map appraisal, CHAPTER IX

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Note for publication: This Supplement contains technical reference data on facilities discussed in SECTION 38.

Section 1. Telephone

A. Outside plant

1. NETWORKS AND SYSTEMS

Length of sections between toll centers or central offices

Number of circuits between toll centers or central offices

Repeater (voice frequency and carrier) locations

Location of test stations

Location of exchanges and offices

Type of construction (open wire, aerial cable, underground cable, radio relay, etc.)

Transfer points to other systems

Use of power lines for transmission of telecom

Any other information suitable for diagrammatic presentation.

2. LINE CONSTRUCTION

a. GENERAL — Type and size of pole generally used, usual pole spacing, cross-arm length and pin spacing, method of conductor suspension, type of hardware and insulators used, date of installation or repair, etc. (Use sketches and photographs.)

b. UNDERGROUND AND UNDERWATER CABLES — Depth of laying, marking methods, protection methods (gas under pressure, conduit, etc.).

3. CABLES AND WIRE

a. CABLE — Kind or type of cable, date of installation or repair, code identification of insulation (preferably from manufacturer or local administration), cable layup, circuit assignment (segregation of 4-wire circuits, power and control circuits, etc.), capacitance, inductance and resistance per unit length, inductance of leading coils, cut-off frequency, physical characteristics of loading apparatus, terminal box circuit assignment, etc.

b. WIRE — Size and material of conductors, wire spacing, scheme of transposition, etc.

4. ACCESSIBILITY OF ROUTES

Usual routes followed by lines—along roads or railroads, cross-country, etc.—and degree of accessibility. Use of route markers.

B. Inside plant

Exact location of all exchanges and offices—give street address and locate on town plan

Type of service (magneto, common battery, attended or unattended dial, etc.). (For Telegraph—manual, automatic Morse, Creed, Baudot, etc.)

Normal and emergency power supplies

Equipped capacity of switchboard or switching equipment and number of subscribers served. Make and model of switchboard or switching equipment

Type and description of main distributing frame and central office exchange protective equipment

Kind (magneto, common battery, dial) and type (wall, desk, hand set) of telephone substation equipment in general use

Toll and exchange wire and cable entrance facilities

Carrier

a) Frequencies used and nomenclature for types

b) Circuit arrangements (2-wire, 4-wire)

c) Description of terminal and repeater equipment

d) Repeater spacing

Description of any services other than telephone (radio program transmission, facsimile, TWX, or other) provided by telephone system.

C. Repair facilities

Extent and location of repair shops

Number, distribution and efficiency of skilled mechanics

Location of warehouses or depots—give descriptions and quantities of each type of material normally stored in each

Section 2. Telegraph

Same topics as for Telephone. If all telephone and telegraph systems use joint facilities, Sections 1 and 2 may be combined.

Section 3. Radio

A. Communications

1. FACILITIES

a. LOCATION — By city, state, or sub-division; by geographical coordinates in degrees, minutes and seconds; and, when available, by street and number, of transmitting, receiving or control stations.

b. STATION CALL SIGNAL

c. TYPE OF EMISSION — Telegraphy on pure continuous wave, modulated telegraphy, telephony, pulse position modulation, frequency modulation, facsimile, etc.

d. POWER OF EACH TRANSMITTER — Antenna power.

e. TYPES OF SERVICE FURNISHED — Fixed, amateur, military, coast, aeronautical, time signals, meteorological, notices to navigators, press, medical advice, calibrated waves, portable, mobile, etc.

f. NUMBER OF TRANSMITTING SETS — With name of manufacturer and manufacturer's type designation or other description, of each.

g. DESCRIPTION OF OPERATING EQUIPMENT — Keying apparatus, teleprinters, facsimile, carrier, etc.

h. FREQUENCY LIMITS WITHIN WHICH THE STATION CAN OPERATE ON REQUEST—1) Frequency or frequencies employed for: Normal operation and emergency operation; and 2) Note any differences between primary and secondary frequencies and/or day or night frequencies.

i. POWER SOURCE — Both regular and emergency.

j. ANY OTHER EMERGENCY OR STAND-BY EQUIPMENT OR ARRANGEMENTS

k. TYPE OF ANTENNA — Rhombic, dipole, curtain, etc.; area normally covered; and direction of propagation in degrees from north; method of feeding and matching.

l. ROUTE AND TYPE OF REMOTE CONTROL — Cable, open wire, micro-wave link between transmitter or receiver station and control station.

m. RADIO NETWORKS — Such as: police, forestry, public utilities, pipeline, intelligence, automotive associations, or other (both public and private).

n. INTERCONNECTION WITH OTHER TELECOMMUNICATIONS FACILITIES

o. CONTOUR OR PROFILE CHARTS OF THE AREA — Showing location of high points suitable for location of microwave line or relay stations.

2. REPAIR FACILITIES

a. EXTENT AND LOCATION OF REPAIR SHOPS

b. NUMBER, DISTRIBUTION AND EFFICIENCY OF SKILLED MECHANICS

c. LOCATION OF WAREHOUSES OR DEPOTS — Give descriptions and quantities for each type of material normally stored in each

B. Broadcasting (including FM and television)

1. FACILITIES

Exact location of each transmitter, studio and control room

Station call letters and frequency

Power of each transmitter (antenna power)

Description of transmitter equipment

Frequency limits within which the station can operate on request

Description of power source—both regular and emergency

Any other emergency or stand-by equipment or arrangements

Type of antenna and area normally served, if directional include beam direction in degrees from north

JUNE 1951

Route and type of remote control (cable, open wire, etc.) between transmitter and control room

Methods of netting or relaying (leased line, coaxial cable, radio relay, modulated light beam, or other)

Television

- a) Types of cameras used
- b) Lines per picture and method of interlacing
- c) Frames per second
- d) Allocated and transmitted bandwidth
- e) Method of audio transmission
- f) Use of color television and type used

Any other methods of entertainment or propaganda dissemination (wires sound, wired wireless, etc.)

Receivers

- a) Number in use and distribution
- b) Most popular types (number of tubes, frequency coverage, power source)
- c) Repair facilities, and spares held locally, for broadcast receivers

2. REPAIR FACILITIES

Extent and location of repair facilities

Number, distribution and efficiency of skilled mechanics

Station spares and source of supply

Section 4. Submarine Cables

A. Facilities

Cable routes, showing both terminals for each cable (cable designations)

Exact landing point of each cable

Exact location and description of cable huts (photographs including from seaward)

Method and location of landline connections between cable huts and operating offices

Physical and electrical characteristics of cables

- a) Length and date of laying or repair of each section
- b) Manufacturer's type or designation of each cable

c) Number of conductors; conductor and insulating material

d) Speed of transmission

Operating Offices

- a) Amount and types of equipment
- b) Exact location
- c) Methods of interconnection with other telecommunication facilities

B. Repair facilities

Description and location of repair shops or cable shops

Location and description of repair supplies

Source of supply

Section 5. Comments on Principal Sources

This Section is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Supplement and thereby inform the user of the general credibility to be accorded the intelligence contained in the Supplement.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

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NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

SUPPLEMENT IV

URBAN AREAS

- Section 1 Introduction
- Section 2 Principal Urban Areas
- Section 3 Urban Areas of Secondary Importance
- Section 4 Urban Areas of Minor Importance
- Section 5 Gazetteer of Urban Areas

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Supplement IV - Urban Areas

OUTLINE

- | | |
|-----------------------------------|--|
| SECTION 1. INTRODUCTION | 10. Health and sanitation facilities |
| | 11. Water supply |
| SECTION 2. PRINCIPAL URBAN AREAS | 12. Other public utilities |
| | 13. Repair and service facilities |
| A. Name (of principal urban area) | 14. War damage and planning |
| 1. Location and importance | |
| 2. Population | B-X. Name (the second most important area, etc.) |
| 3. Means of access | |
| 4. Internal transportation | SECTION 3. URBAN AREAS OF SECONDARY IMPORTANCE |
| 5. Physical characteristics | |
| 6. Important industry | SECTION 4. URBAN AREAS OF MINOR IMPORTANCE |
| 7. Warehouses and storage | |
| 8. Billeting facilities | SECTION 5. GAZETTEER OF URBAN AREAS |
| 9. Principal buildings | |

OUTLINE GUIDE

Note for publication: Information in this Supplement is presented as a detailed treatment of individual urban areas which are covered in a general manner in SECTION 25. The NIS areal summary of urban areas in SECTION 25 will not be duplicated in this Supplement.

Section 1. Introduction

Short statement outlining basis of selection of urban areas, size, importance, etc., and their arrangement. (NIS urban areas map—locates all urban areas or towns selected for study in SUPPLEMENT IV. Each urban area is given an identifying map index number to assist in ready identification, where these areas are located in a dense pattern, map insets at a larger scale will be added. This

map will include the main drainage pattern, navigable waterways, main railroad, and highway networks, important terrain features, and symbols depicting town functions. Depending upon extent of an NIS Area, the selected scale will be from 1:500,000 to 1:5,000,000; insets at practical desirable scales.)

Section 2. Principal Urban Areas

Army will submit lists of key strategic urban areas and other selected urban areas to the NIS Committee for transmission to IAC agencies for comment and concurrence. Army will make the final selection. Discuss or introduce the arrangement of the principal urban areas selected for CHAPTER II, Subsection 25, B, 1, with reasons for the order followed, their relative importance to the areas of the NIS as a whole, to the sub-areas as determined by the discussion in CHAPTER II, Subsection 25, A, and to each other. (Paragraph headings for each urban area will be alphabetical and

each area will be discussed in sequence according to the importance of the area, i.e., A. the principal urban area, B. the second most important, etc. A small reference map of the NIS Area with locations of the principal urban areas should be included. Urban area maps may be located with aprons at the end of SECTION 2.)

A. Name (of principal urban area)

Alternate names in parentheses, urban areas map index number, and population (large scale map with apron at end of SECTION 2).

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1. LOCATION AND IMPORTANCE

Coordinates; basic importance—political, industrial center, communications, etc., outlined in a short introductory statement. (Urban areas environs map and location map at small scale positioning urban area in relationship to neighboring areas, etc., with key railroad, highway and waterway communications will accompany the large scale urban area map.)

2. POPULATION

Statistics over a period of years, if available, with an evaluation of trends, growth or recession, and a statement as to reliability; ethnic and religious statistics and problems, if pertinent or significant, and subdivided by sub-areas or sections of the town if there is significant segregation. (Include a population or density map adjacent to text. This might be combined with a building density map; small scale.)

3. MEANS OF ACCESS

Short statement as to importance of urban area in the internal and external transportation of the NIS. (Refer to environs map.)

a. RAIL — Short statement, supplemented by tabulated data, of the rail facilities entering and serving the area. (Where there is an important suburban and internal rail system, only main line information will be included in this topic with appropriate cross-references. Lines, distances to next adjacent major rail centers, numbers of tracks, locations of bridges in area and their basic statistics, facilities, shops, stations, etc., are compiled on urban area map.)

b. ROAD — Short statement, supplemented by tabulated data or annotated map, of the highways entering and serving the town with official highway route numbers. (These highways, their distance to next adjacent highway center, traffic-lane capacities, locations of bridges and their basic statistics, condition and type of paving, etc., are compiled on urban area map.)

c. WATER — Short statement, supplemented by tabulated data, of navigable waterways serving area and facilities within area. (Rivers, canals, locks, docks and wharves, etc., are compiled on urban area map.)

d. AIR — Short statement discussing air facilities serving area. (Airfields, with their important facilities within town area are compiled on urban area map. All airfields within vicinity of area are located on environs map.)

e. CROSS COUNTRY — Statement discussing cross-country means of approach to or exit from the area, with appropriate notes or other means of identification on the urban area map. (The most

important routes or avenues of cross-country approach indicated on environs map.)

4. INTERNAL TRANSPORTATION

Short statement introducing internal transportation communications with references to urban area map. (Illustrated by photographs and diagrams of equipment and facilities.)

a. SUBWAY OR RAIL — Statement of routes, distances, depths of tunnels, types of construction, bridges, etc. May be amplified by tabulated data where considered desirable. (Data compiled on urban areas map and/or transportation map.)

(Example)
FIGURE 2-1. TOWN SUBWAY SYSTEM

STATIONS	DISTANCE BETWEEN STATIONS	DEPTHS	CONSTRUC- TION OF TUNNELS	REMARKS
	miles	ft		
ROUTE 1: BLACK TO VIOLET LINE				
Black	1.25	55	Twin cast iron tubes	2-escalators
White	0.83	15	Cut and cover	Transfer point to Pink Line
Blue		10		
.... etc.				

b. STREETCAR — Statement, with reference to urban areas map and/or to transportation map, of routes, equipment, source and distribution of power, etc., and locations of carbarns.

c. STREET — Statement on public automotive transportation, buses, trolley buses, taxis, trucking, with information as to capacities of garages, parking areas and buildings, trucking terminals, etc., which are also compiled on urban area map. (Trolley buses may warrant treatment as a separate subsection.)

d. CANAL AND RIVER FERRY — Statement covering internal waterways transportation, illustrated by photographs and diagrams, with information on routes, slips, wharves, boats, ferries, barges, tugs, etc. (Appropriate information compiled on urban areas map and/or transportation map.)

5. PHYSICAL CHARACTERISTICS

Consider physical conditions affecting an urban area and its immediate environs. Short statement, or introduction, outlining salient factors, with reference to urban areas map, and/or environs map.

a. TOPOGRAPHY — Discuss topographic features in principal urban areas using following subdivisions:

(1) *Terrain* — Statement discussing terrain underlying urban area, with special references to prominent landmarks, important topographic

features, such as gullies, high points, cliffs, etc., with accompanying compilations on urban area map and illustrated by photographs, ground and/or aerial, stereographs, etc.

(2) *Shape and dimensions* — Short statement, amplified by statistics and reference to urban area map, describing predominant shape of area, and its important dimensions, length, width, area, elevations (to determined datum); comparison with other urban areas.

b. **GEOLOGY** — Statement on types and depths of soil, nature of rock both outcrops and subbase, caves, etc., illustrated by geology map (where sufficient information is available) and/or reference to urban area map and/or environs map.

c. **PLAN** — Discuss plan of area as implanted on the physical terrain. In principal urban areas, use following subdivisions:

(1) *Functional pattern* — Short statement discussing subdivision of the urban area into its constituent parts such as residential, commercial, industrial, mixed, etc., with references to urban area map, and/or function map. This will also include open and recreational areas especially in immediate outskirts of the area.

(2) *Street pattern* — Statement describing basic street pattern, or patterns in specific subsections with references to urban area map, widths of through routes, main and minor streets, types of pavement (illustrated by a street paving map where feasible and photographs of typical conditions, etc.). Widths of streets to be determined as follows:

CAPACITY	WIDTH BETWEEN CURBS feet
1-lane	12 minimum
2-lane	21 minimum
3-lane	31
4-lane	40 to 45

(3) *Firebreaks* — Statement describing actual or possible firebreaks such as wide streets, parks, canals, railroad alignments, etc., with reference to urban area map and/or firebreak map, which could be combined with the function map.

d. **STRUCTURAL** — Consider predominant types and construction of buildings, densities of buildings within building lines and to total area. In principal urban areas use following subdivisions (references to urban area map):

(1) *Density* — Short statement describing predominant patterns possibly supplemented by illustrated table and accompanying urban area density map. (Illustrations such as aerial photographs, aerial stereographs, typical town block building layouts with equivalent ground photography.)

(2) *Construction* — Statement on predominant types of construction amplified by table with references to density map and/or urban area map. (Illustrated by photographs, drawings, and/or diagrams.)

(3) *Shelters* — Statements as to adequacy of underground shelter facilities; constructed and natural. (Locations indicated by appropriate symbols on urban area map.)

6. IMPORTANT INDUSTRY

The most important or strategic industrial plants, such as ballbearing plants, are discussed in short statements and, if sufficient information is available, pertinent data concerning each plant, such as ground area, numbers of buildings, their construction, and floor areas, workers, power consumption, capacities, etc., is compiled into a table, with references to urban area map and to function map.

On the urban area map, building layouts of plants discussed in this paragraph will be drawn in detail if information is available; illustrated by supplemental aerial photographs of most important and strategic plants. Other industries, and industrial areas will be identified by an over-all area or site symbol, with, in most important industrial centers, distinctive industry picture symbolization.

(Example)
FIGURE 2-2. INDUSTRY IN (NAME OF TOWN)

NAME OF PLANT	PRODUCT AND CAPACITY	AREA (sq ft)		CONSTRUCTION OF BUILDINGS
		Gross	Buildings	
Ball bearing plant; 400 employees	Ball bearings all sizes 10,000 tons per year	50,000	25,000	1 story brick walls saw-tooth glass roofs
..... plant, etc.				

7. WAREHOUSES AND STORAGE

Introductory statement on availability of storage in urban area, with references to urban area map and/or function map with information on construction of buildings.

a. **BULK** — Most important facilities, capacities, with locations identified on urban area map.

b. **COLD STORAGE** — Most important facilities for refrigeration storage, capacities, type of refrigerator, power consumption, etc. (Locations identified on urban area map.)

c. **PETROLEUM PRODUCTS** — Most important facilities, types and capacities of tanks, etc., with locations identified on urban area map and aerial photographs of most important areas.

d. **OPEN STORAGE** — Short statement of availability of actual or possible areas suitable for open bulk storage, areas, capacities, etc. (Locations identified on urban area map.)

e. **EXPLOSIVES** — Short statement of available facilities, types and construction of magazines, and types of explosives stored, dynamites or high explosives, etc. (Locations identified on urban area map.)

8. BILLETING FACILITIES

Statement outlining availability of billeting both for personnel and for automotive transportation, with appropriate references to identified points on urban area map. Where sufficient information is available, use the following subdivisions:

a. **MILITARY BARRACKS** — Locations and capacities. On urban area map, an appropriate over-all pattern symbol is used for identification.

b. **SCHOOLS** — The most important institutions are discussed in a short statement, with reference to identified locations on urban area map. Smaller institutions are located on urban areas map by an appropriate symbol, and/or identified point index number.

c. **HOTELS AND OTHER SUITABLE BUILDINGS** — Statement outlining locations and capacities of most important hotels and structures such as theaters, opera houses, etc., (Locations identified on urban area map).

d. **OPEN AREAS** — Statement discussing availability of open areas, such as campgrounds, recreational parks, vacant land, suitable both for encampments and for automotive transport parks. (Locations identified on urban area map and/or environs map.)

9. PRINCIPAL BUILDINGS

Statement discussing the most important buildings and institutions, especially those which are landmarks, with locations identified on urban area map. When information is available it will be tabulated as follows:

(Example)

FIGURE 2-3. PRINCIPAL BUILDINGS

BUILD- ING	DESCRIPTION	AREA	STORIES	TOWN MAP INDEX
		sq ft		
Town Hall	Medieval building masonry with floors and roof construc- tion, slate roofing	15,700	3	1 d

(Illustrated by photographs of most outstanding structures.)

10. HEALTH AND SANITATION FACILITIES

Short introductory statement outlining any important factors or conditions affecting health of the urban area, its immediate vicinity and any subsection thereof.

a. **HOSPITALS AND MEDICAL FACILITIES** — Short introductory statement with accompanying table.

(Example)

FIGURE 2-4. HOSPITAL FACILITIES

HOSPITAL	NO. OF BEDS	SPECIAL FACILITIES	TOWN MAP INDEX
Red Cross Hospital	235	3 operating rooms X-ray laboratory	7 e
..... etc.			

b. **SEWAGE DISPOSAL** — Includes any and all methods of waste disposal and storm water run-off, including statements as to non-existence of facilities. This item may be subdivided as follows:

Sanitary sewage system
Combination system
Storm sewers
Raw sewage
Uncollected (cesspools and privies)
Garbage collection and disposal
Industrial wastes disposal

NOTE Appropriate references are made to urban area map and/or sewage system map (which may be a combined utility map) where sufficient data is available.

11. WATER SUPPLY

Information discussed in this paragraph pertains in general to developed municipal systems. However, it is also important to discuss all available sources such as wells, springs, rivers, etc., especially where a developed system is lacking or inadequate to serve the total needs of the area. (Important facilities are located on urban area map, or, if at a distance, upon the environs map, including reservoirs, aqueducts, main purification or other treatment plants, etc.) Where sufficient information is available, this paragraph may be subdivided as follows (appropriate cross references to Subsection 12, e, following, regarding water supply for fire-fighting are also included):

a. **EVALUATION OF AVAILABLE SUPPLY** — Quantitative and qualitative statements, including discussion of possible untapped sources.

b. **SOURCES** — Short statement as to available quantities. (Locations may be shown on either urban area map or environs map.)

c. **COLLECTION AND STORAGE**

d. **PURIFICATION** — This includes statements as to potability after treatment or various sources of supply and methods of treatment.

e. **DISTRIBUTION** — Where information is available, it is compiled into a water supply map which might be part of a combined utility map.

12. **OTHER PUBLIC UTILITIES**

Short statement evaluating available public utilities, such as restoration after war damage, which is common to all or some of the following subheadings. References are made to appropriate chapters and sections in the NIS where pertinent. (Most important installations are located on urban area map.)

a. **POWER AND HEAT** — The present practice of combining electric power production with central heating as a byproduct in many countries indicates that these utilities be considered together. Statements as to capacities, condition, sources of power, etc. are supplemented by tabulated data pertinent to the particular urban area. Where available, high tension power lines are indicated by an appropriate symbol on the urban area map and/or utility map. Where necessary, this paragraph is divided into the following subparagraphs:

(1) **Power lines** — Information on incoming or outgoing high-voltage power lines.

(2) **Power plants** — Include Hydroelectric, Thermal and combined Thermal heating plants.

(3) **Distribution**

(Example)

FIGURE 2-5. POWER PLANTS

NAME OF PLANT	FUEL	ELEC- TRIC POWER		OUT- PUT HEAT	TOWN MAP INDEX
		kw	cu ft		
Central power plant	Peat 100,000 tons per year	10,500	550,000	9 F	
..... etc.					

b. **ICE** — Short statement regarding available facilities and buildings. (Locations identified on urban area map.) Where necessary, data is subdivided as follows:

(1) **Natural** — Statement giving information as to sources, methods of collection, storage, and reliability of normal average supply with reference to climatic variations.

(2) **Manufactured** — Statement as to plants, capacities, power consumption, average ice consumption per person per day, etc. (Locations of plants identified on urban area map.)

c. **GAS** — (Reference to urban area map.)

(1) **Natural gas** (Reference to CHAPTER VI and SUPPLEMENT V) — Sources, pipelines sizes and capacities in cubic feet per day.

(2) **Manufactured gas** — Locations of plants, fuel used, quantity required, maximum production per day, capacities of storage facilities, and types of storage.

(3) **Distribution** — Sizes of mains, normal distribution pressure, and so on.

(4) **Use** — Industrial, commercial, residential.

(5) **Canned gas** — Production facilities, distribution, etc.

d. **TELECOMMUNICATIONS** — (Reference to CHAPTER III.) Locations of principal facilities and relation to national and international networks. (Reference to urban area map.)

(1) **Telephone**

(2) **Telegraph**

(3) **Cable** — Also across inland waterways.

(4) **Radio (wireless)**

e. **FIREFIGHTING** — Statement of facilities for fire fighting, equipment, buildings, and evaluation of efficiency of personnel, with data as to hydrants, couplings (especially thread sizes, right or left), hose. Also, statement as to civilian defense organizations, if any.

13. **REPAIR AND SERVICE FACILITIES**

a. **RAILROAD, STREETCARS, RAPID TRANSIT**

b. **AUTOMOTIVE, GARAGES, TRACTOR STATIONS, ETC.**

c. **MACHINE SHOPS AND FOUNDRIES**

d. **OTHER**

e. **MECHANICAL STANDARDS AND GAGES OTHER THAN U.S. STANDARDS**

14. **WAR DAMAGE AND PLANNING**

Statements as to amount and extent of war damage, with reference to urban area map where such areas are identified by a suitable over-all pattern symbol; plans for/and program of reconstruction of war damage; proposals for replanning and planned expansion; zoning (with accompanying zoning map), which may be combined with density map, etc.

B-X Name (the second most important areas, etc.)

Section 3. Urban Areas of Secondary Importance

(About 50 maximum—reference to SECTION 25 of CHAPTER II and to urban area master map.)

Each secondary town illustrated by a one page, or less, condensed tabulation, accompanied by, either

on the facing page or same page, a plan with a small scale location map, and/or photographs. (Photographs might be combined into a special section on high-grade paper for better reproduction.)

(Examples)

FIGURE 3-1. ANALYSIS OF (TOWN NAME)

1. VARIANT NAMES:		COORDINATES:		8. INTERNAL TRANSPORTATION:	
2. TERRAIN:				Streets: Transit:	
3. GEOLOGY:				Bottlenecks:	
4. LANDMARKS:					
5. STATISTICS:		Total	Built-up	9. HEALTH:	
Population: Area (sq miles)		.....	.....	10. HOSPITALS:	
Density (persons per sq mile)		.....	.....	11. BILLETING:	
Population change:		.....	.....	12. STORAGE:	
		Elevations:			
		Max:			
		Aver:			
		Min:			
6. FUNCTIONS:				13. UTILITIES:	
Political:		Agricultural:		Water Supply:	
Industrial:		Military:		Sewage and garbage:	
		Raw materials:		Electric power:	
				Heat:	
				Gas:	
				Ice:	
7. MEANS OF ACCESS:				14. TELECOMMUNICATIONS:	
Rail:		Water:		Telephone:	
Road:		Air:		Telegraph:	
		Cross country:		Radio:	
				15. TYPES OF CONSTRUCTION:	
				16. REMARKS:	

Section 4. Urban Areas of Minor Importance

Consider approximately 100 to 150 towns depending upon area of survey. Introductory statement giving reasons for selection of urban areas, and explanation of following table. Illustrate by table giving urban area map index numbers, names (with alternates), populations (with dates), map coordinates and locations, major functions and importance, and general remarks of important features.

(Example)

FIGURE 4-1. TOWNS OF MINOR IMPORTANCE

TOWN (Name):	(Coordinates); population; size, etc.
Transportation:	
Functions and Importance:	
Utilities:	
Remarks:	

JUNE 1951

U R B A N A R E A S

~~CONFIDENTIAL~~*Section 5. Gazetteer of Urban Areas*

Consists of an alphabetical list of the principal, secondary and minor urban areas as follows:

(Example)

GAZETTEER OF TOWNS

NAME (ALTERNATE NAMES)	COORDI- NATES	TOWN MAP		IMPORTANCE
		Index No.	Grid Coordi- nates	
	° ' ''			
ALPHA (Alfor)	89 50 100 50	40	A 7	Transportation
.... BETA, etc.				

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 PAGE IV-7

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

SUPPLEMENT V

PETROLEUM

Section 1 Exploration and Development
Section 2 Production
Section 3 Refining and Processing
Section 4 Transportation
Section 5 Equipment and Materials
Section 6 Requirements and Supply
Section 7 Economic and Political
Section 8 Natural Gas

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Supplement V - Petroleum

OUTLINE

SECTION 1. EXPLORATION AND DEVELOPMENT

- A. General
- B. Geology
- C. Exploration
 - 1. Summary
 - 2. Geological and geophysical exploratory activities
 - 3. Exploratory drilling accomplishments
 - 4. Exploratory results to date
 - 5. Evaluation of exploratory development and research methods
 - 6. Significant factors affecting past, present, and future exploration
 - 7. Concessions data
- D. Reserves
 - 1. Summary
 - 2. Crude
 - 3. Natural gas liquids
 - 4. Ownership of reserves
 - 5. Evaluation of methods used in estimating reserves
- E. Comments on principal sources

SECTION 2. PRODUCTION

- A. General
- B. Historical background
- C. Location of fields and wells
- D. Crude production
 - 1. Output and disposition by fields and by companies
 - 2. Present and estimated productive capacity
 - 3. Production activity required to obtain reported forward production estimates
 - 4. Data on individual fields
 - 5. Maintenance and repair problems
 - 6. General evaluation of vulnerability of producing facilities
- E. Comments on principal sources

SECTION 3. REFINING AND PROCESSING

- A. General
- B. Crude refineries
 - 1. Brief historical sketch
 - 2. Crude or charge stock
 - 3. General descriptive processing pattern

- 4. Refinery storage for crude and refined products
- 5. Sources, quantities, and supplies of power, fuel, water, chemicals
- 6. Refinery statistics
- 7. Future plans for expansion, conversion or reduction of capacity
- 8. Vulnerability of facilities
- C. Natural gas liquids processing plants
- D. Substitute liquid fuels plants
- E. Comments on principal sources

SECTION 4. TRANSPORTATION

- A. General
- B. Transport facilities
 - 1. Pipeline systems
 - 2. Railway
 - 3. Inland waterways
 - 4. Ocean tankers
- C. Terminal facilities, land and marine
 - 1. Storage of crude and products
 - 2. Loading and handling facilities for crude and products
 - 3. Materials handling facilities
 - 4. Administration and operation, indicating ownership, government control and regulation
- D. General evaluation of vulnerability of facilities relating to transportation
- E. Comments on principal sources

SECTION 5. EQUIPMENT AND MATERIALS

- A. General
- B. Requirements
 - 1. Exploration
 - 2. Production
 - 3. Refining and processing
 - 4. Transportation, storage, and terminals
- C. Availability
 - 1. Local
 - 2. Imported
- D. Comments on principal sources

SECTION 6. REQUIREMENTS AND SUPPLY

- A. General
- B. Over-all petroleum supply and demand balance

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SECTION 6. REQUIREMENTS AND SUPPLY (*Continued*)

- C. Crude requirements, by quantity and type
 - 1. For refineries
 - 2. Exported
- D. Products requirements, by quantity and type
 - 1. Domestic civilian
 - 2. Military
 - 3. Export
- E. Supply, by quantity and type
 - 1. Crude
 - 2. Products
- F. Stockpiles of crude and products in relation to requirements
- G. Factors affecting requirements and supply
 - 1. Geographic
 - 2. Economic and political
- H. Degree of self-sufficiency or import dependence for requirements, analyzing specialized types of crude or products required
- I. Probable future demand and supply situation
- J. Comments on principal sources

SECTION 7. ECONOMIC AND POLITICAL

- A. General
- B. Economic
 - 1. Labor force
 - 2. Ownership and finance
- C. Laws and regulations
 - 1. Basic laws
 - 2. Other pertinent legislation

- D. Evaluation of programs, policies, attitudes
 - 1. Governmental
 - 2. Corporate
- E. Comments on principal sources

SECTION 8. NATURAL GAS

- A. General
- B. Importance to domestic economy
- C. Sources
- D. Resources
 - 1. Location
 - 2. Reserves
- E. Characteristics
- F. Production
 - 1. By fields and companies
 - 2. Drilling and production problems
 - 3. Gathering, field storage, and power facilities
 - 4. Geographic factors affecting production
 - 5. Evaluation of field development, technology and research
 - 6. Productive capacity of the fields
- G. Gas utilization and quantities consumed
 - 1. Industrial and commercial
 - 2. Residential
 - 3. Repressuring of oil fields
 - 4. As fuel in oil and gas fields
 - 5. For production of natural gas liquids
 - 6. Flared
- H. Transportation
- I. Comments on principal sources

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

Note for publication: This Supplement contains more comprehensive and detailed treatment of material in SECTION 62.

Section 1. Exploration and Development

A. General

B. Geology

- 1) General geology of the area
- 2) Geological classification of the area as to prospects
 - a) Proven
 - b) Favorable
 - c) Possible
 - d) Unfavorable
- 3) Evaluation of the adequacy of geological coverage and of technology and research

C. Exploration

1. SUMMARY
2. GEOLOGICAL AND GEOPHYSICAL EXPLORATORY ACTIVITIES
3. EXPLORATORY DRILLING ACCOMPLISHMENTS
 - a. DATA ON EXPLORATORY WELLS
 - b. METHODS OF SELECTING DRILL SITES
4. EXPLORATORY RESULTS TO DATE
 - a. NEW FIELDS
 - b. FIELD EXTENSIONS
 - c. NECESSITY FOR ADDITIONAL EXPLORATION
5. EVALUATION OF EXPLORATORY DEVELOPMENT AND RESEARCH METHODS
6. SIGNIFICANT FACTORS AFFECTING PAST, PRESENT, AND FUTURE EXPLORATION
7. CONCESSIONS DATA
 - a. EXPLOITATION CONCESSIONS IN FORCE
 - b. EXPLORATION CONCESSIONS IN FORCE
 - c. CONCESSIONAIRES OPERATING IN THE AREA
 - d. BRIEF HISTORY AND EVALUATION OF OVER-ALL CONCESSIONS DEVELOPMENT TO DATE

D. Reserves

1. SUMMARY
2. CRUDE
 - a. PROVEN, BY FIELD
 - b. PROBABLE
 - c. CHARACTERISTICS OF PROVEN RESERVES
3. NATURAL GAS LIQUIDS
 - a. PROVEN, BY FIELDS
 - b. PROBABLE
 - c. CHARACTERISTICS OF PROVEN RESERVES
4. OWNERSHIP OF RESERVES
 - a. NATIONALIZED
 - b. PRIVATELY OWNED
5. EVALUATION OF METHODS USED IN ESTIMATING RESERVES

E. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Supplement and thereby inform the user of the general credibility to be accorded the intelligence contained in the Supplement.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 2. Production

A. General

B. Historical background

C. Location of fields and wells

D. Crude production

1. OUTPUT AND DISPOSITION BY FIELDS AND BY COMPANIES

2. PRESENT AND ESTIMATED PRODUCTIVE CAPACITY (By fields, within MER and maximum)

3. PRODUCTION ACTIVITY REQUIRED TO OBTAIN REPORTED FORWARD PRODUCTION ESTIMATES

4. DATA ON INDIVIDUAL FIELDS

a. GEOLOGICAL FEATURES

b. FIELD CHARACTERISTICS

- (1) *Productive acreage*
- (2) *Producing zones*
- (3) *Reservoir characteristics*
- (4) *Spacing pattern*

c. CRUDE CHARACTERISTICS

d. DRILLING ACTIVITY AND WELL PERFORMANCE

e. EVALUATION OF DEVELOPMENT PRACTICES

- (1) *Drilling and production problems*
- (2) *Conservation and secondary recovery*
- (3) *Treating and stabilization*

f. GATHERING, FIELD STORAGE, AND POWER FACILITIES

g. GEOGRAPHIC FACTORS AFFECTING PRODUCTION

h. EVALUATION OF FIELD DEVELOPMENT, TECHNOLOGY, RESEARCH

i. REPORTED FORWARD PRODUCTION ESTIMATE AND PRODUCTIVE ACTIVITY REQUIRED

5. MAINTENANCE AND REPAIR PROBLEMS

6. GENERAL EVALUATION OF VULNERABILITY OF PRODUCING FACILITIES

E. Comments on principal sources

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Section 3. Refining and Processing

A. General

B. Crude refineries

1. BRIEF HISTORICAL SKETCH

Including name, location, type, capacity, ownership, operator, and evaluation of operating efficiency

2. CRUDE OR CHARGE STOCK

Including sources, means of transport, and characteristics

3. GENERAL DESCRIPTIVE PROCESSING PATTERN

Including, where feasible or available, plant layout and flow diagrams, aerial and ground photographs.

a. FLEXIBILITY TO VARY YIELDS OR PRODUCE OTHER PRODUCTS

b. COMPLEMENTARY TO OR INTER-DEPENDENCE UPON OTHER REFINERIES

c. EVALUATION OF MAINTENANCE AND REPAIR PROBLEMS

d. EVALUATION OF EFFICIENCY WITH RESPECT TO COMPETENCE OF MANAGEMENT, TECHNICAL DIRECTION AND SKILLED LABOR

e. STATUS AND EVALUATION OF TECHNOLOGY AND RESEARCH

4. REFINERY STORAGE FOR CRUDE AND REFINED PRODUCTS

Indicate number, type, capacity and location of the tanks

JUNE 1951

P E T R O L E U M

~~CONFIDENTIAL~~**5. SOURCES, QUANTITIES, AND SUPPLIES OF POWER, FUEL, WATER, CHEMICALS****6. REFINERY STATISTICS**

a. THROUGHPUT AND PRODUCT YIELDS — Including a description of petro-chemical and other specialty products manufacture.

b. PRODUCT CHARACTERISTICS AND QUALITY

c. DISPOSITION OF PRODUCTS BY TYPE AND QUANTITY

7. FUTURE PLANS FOR EXPANSION, CONVERSION OR REDUCTION OF CAPACITY**8. VULNERABILITY OF FACILITIES****C. Natural gas liquids processing plants**

Where natural gas liquids plants are a present or potential factor in an area, a detailed description will be given similar in scope and treatment to that given to refineries under "B".

D. Substitute liquid fuels plants

In those few countries where production of substitute liquid fuels is of potential or major significance, detailed treatment will be given, similar in scope to that given to refineries under "B", including an analysis of resources and availability of the raw materials.

E. Comments on principal sources

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Section 4. Transportation**A. General****B. Transport facilities****1. PIPELINE SYSTEMS**

a. LOCATION OF PIPELINES AND PUMP STATIONS — With reference to producing fields, refineries, and terminals.

b. GEOGRAPHIC CONSIDERATIONS

c. DESCRIPTION

(1) *Pipelines*

(2) *Pump stations*

d. CAPACITIES — Types of crude and products transported. Evaluation of adequacy of present facilities

e. CONSTRUCTION AND REPAIR PROBLEMS

f. PROBABLE DEVELOPMENTS

g. ADMINISTRATION AND OPERATION, INDICATING OWNERSHIP, GOVERNMENT CONTROL AND REGULATION

2. RAILWAY

With appropriate reference to CHAPTER III, Transportation and Telecommunications, where railway transport is an important factor in crude and product movements, indicate generally:

a. LOCATION AND BRIEF DESCRIPTION

b. NUMBER AND CAPACITY OF TANK CARS

c. ADEQUACY OF RAILWAY FACILITIES TO HANDLE PRESENT AND ANTICIPATED CRUDE AND PRODUCTS MOVEMENT

d. PROBABLE DEVELOPMENTS

e. ADMINISTRATION AND OPERATION, INDICATING OWNERSHIP, GOVERNMENT CONTROL AND REGULATION

3. INLAND WATERWAYS

With appropriate reference to CHAPTER III, Transportation and Telecommunications, where inland waterway transport is an important factor in crude and products movements, indicate generally:

PAGE V-5

- a. LOCATION AND GENERAL DESCRIPTION
- b. NUMBER AND CAPACITY OF MARINE TRANSPORT FACILITIES EMPLOYED (TANKERS AND BARGES)
- c. ADEQUACY OF MARINE FACILITIES TO HANDLE PRESENT OR ANTICIPATED MOVEMENT OF CRUDE AND PRODUCTS
- d. PROBABLE DEVELOPMENTS
- e. ADMINISTRATION AND OPERATION, INCLUDING OWNERSHIP, GOVERNMENT CONTROL AND REGULATION
- 4. OCEAN TANKERS

With appropriate reference to CHAPTER III, Transportation and Telecommunications, where ocean transport is an important factor in crude and products movement, indicate: Number, type, and quantity of tanker movements by terminals

C. Terminal facilities, land and marine

With appropriate reference to CHAPTER III, Transportation and Telecommunications, indicate:

- 1. STORAGE OF CRUDE AND PRODUCTS
 - a. LOCATION AND DESCRIPTION
 - b. ADEQUACY OF PRESENT FACILITIES
 - c. PROBABLE DEVELOPMENTS
- 2. LOADING AND HANDLING FACILITIES FOR CRUDE AND PRODUCTS
 - a. LOCATION AND DESCRIPTION

- b. THROUGHPUT CAPACITY AND LOADING RATES
- c. ADEQUACY OF PRESENT FACILITIES
- d. PROBABLE DEVELOPMENTS
- 3. MATERIALS HANDLING FACILITIES
 - a. LOCATION AND DESCRIPTION
 - b. ADEQUACY OF PRESENT FACILITIES
 - c. PROBABLE DEVELOPMENTS
- 4. ADMINISTRATION AND OPERATION, INDICATING OWNERSHIP, GOVERNMENT CONTROL AND REGULATION

D. General evaluation of vulnerability of facilities relating to transportation

E. Comments on principal sources

This Subsection is to serve the following purposes:

- 1) To provide an evaluation of the principal source material used in preparing the Supplement and thereby inform the user of the general credibility to be accorded the intelligence contained in the Supplement.
- 2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 5. Equipment and Materials

A. General

Degree of self-sufficiency or import dependence for equipment and supplies for the petroleum industry.

B. Requirements

- 1. EXPLORATION
- 2. PRODUCTION
- 3. REFINING AND PROCESSING
- 4. TRANSPORTATION, STORAGE, AND TERMINALS

C. Availability

- 1. LOCAL
- 2. IMPORTED

D. Comments on principal sources

This Subsection is to serve the following purposes:

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- 2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 6. Requirements and Supply

A. General

B. Over-all petroleum supply and demand balance

C. Crude requirements, by quantity and type

1. FOR REFINERIES

2. EXPORTED

a. BY PORT OF EXIT

b. BY COUNTRY OF DESTINATION

c. MEANS OF TRANSPORT

D. Products requirements, by quantity and type

1. DOMESTIC CIVILIAN

a. INLAND

b. BUNKER LIFTINGS

c. REFINERY FUEL CONSUMPTION AND LOSSES

2. MILITARY

a. FOR CONSUMPTION IN THE AREA

b. FOR SHIPMENT OVERSEAS

3. EXPORT

a. BY PORT OF EXIT

b. BY COUNTRY OF DESTINATION

c. MEANS OF TRANSPORT

E. Supply, by quantity and type

1. CRUDE

a. DOMESTIC

b. IMPORT

(1) *By port of entry*

(2) *By country of source*

(3) *Means of transport*

2. PRODUCTS

a. DOMESTIC

b. IMPORT

(1) *By port of entry*

(2) *By country of source*

(3) *Means of transport*

F. Stockpiles of crude and products in relation to requirements

G. Factors affecting requirements and supply

1. GEOGRAPHIC

2. ECONOMIC AND POLITICAL

a. DOMESTIC

b. INTERNATIONAL

H. Degree of self-sufficiency or import dependence for requirements, analyzing specialized types of crude or products required

I. Probable future demand and supply situation

J. Comments on principal sources

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Supplement and thereby inform the user of the general credibility to be accorded the intelligence contained in the Supplement.

2) To indicate those aspects of the subject about which information is deficient or unavailable and thereby provide collectors of information with collection targets. In this connection, the principal sources (not necessarily all sources) actually used should be indicated.

Section 7. Economic and Political**A. General****B. Economic****1. LABOR FORCE**

a. AVAILABILITY, RELATIVE IMPORTANCE, AND RELATIVE EFFICIENCY OF THE PETROLEUM LABOR FORCE

b. LABOR RELATIONS AND ORGANIZATION

(1) *General development and present status of labor organizations*

(2) *General pattern of wages, working conditions, and special agreements*

2. OWNERSHIP AND FINANCE

a. OWNERSHIP CHARACTERISTICS

(1) *Nationality, financial control, and corporate organization*

(2) *Factors influencing local participation in the industry*

(3) *Local management*

b. FINANCIAL

(1) *Pattern of earnings and return on capital*

(2) *Significant factors such as depletion policies, reinvestment of earnings*

(3) *Effects of governmental regulations on disposition of earnings and capital*

C. Laws and regulations

With appropriate reference to CHAPTER V, Political.

1. BASIC LAWS

a. OWNERSHIP OF SUBSOIL

b. RIGHTS OR RESTRICTIONS ON OPERATORS, NATIONAL AND FOREIGN

c. GRANTING OF MONOPOLIES

d. ORGANIZATION OF COMPANIES

e. PARTICIPATION OF NATIONALS IN EMPLOYMENT, MANAGEMENT AND FINANCIAL CONTROL

2. OTHER PERTINENT LEGISLATION**D. Evaluation of programs, policies, attitudes****1. GOVERNMENTAL****2. CORPORATE****E. Comments on principal sources**

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Section 8. Natural Gas

A. General

B. Importance to domestic economy

C. Sources

D. Resources

1. LOCATION
2. RESERVES

E. Characteristics

F. Production

1. BY FIELDS AND BY COMPANIES
2. DRILLING AND PRODUCTION PROBLEMS
3. GATHERING, FIELD STORAGE, AND POWER FACILITIES
4. GEOGRAPHIC FACTORS AFFECTING PRODUCTION
5. EVALUATION OF FIELD DEVELOPMENT, TECHNOLOGY AND RESEARCH
6. PRODUCTIVE CAPACITY OF THE FIELDS

G. Gas utilization and quantities consumed

1. INDUSTRIAL AND COMMERCIAL
 - a. FUEL
 - b. CHEMICALS MANUFACTURE
2. RESIDENTIAL
3. REPRESSURING OF OIL FIELDS
4. AS FUEL IN OIL AND GAS FIELDS
5. FOR PRODUCTION OF NATURAL GAS LIQUIDS
6. FLARED

H. Transportation

I. Comments on principal sources

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Security Information

NATIONAL INTELLIGENCE SURVEY

STANDARD INSTRUCTIONS

SPECIAL NIS

MARINE CLIMATE AND OCEANOGRAPHY

Section 1 Introduction
Section 2 Marine Climate
Section 3 Oceanography

CENTRAL INTELLIGENCE AGENCY
Washington, D. C.

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Special NIS - Marine Climate and Oceanography

OUTLINE

- SECTION 1. INTRODUCTION
 - (6) Color
 - (7) Transparency
- SECTION 2. MARINE CLIMATE
 - A. Climatic controls
 - B. Surface winds
 - C. Surface air temperature
 - D. Precipitation
 - E. Cloudiness
 - F. Visibility and fog
 - G. Special weather phenomena
 - H. Weather and military operations
 - I. Map appraisal and comments on principal sources
 - 1. Map and chart appraisal
 - 2. Comments on principal sources
- SECTION 3. OCEANOGRAPHY
 - A. General circulation
 - B. Sea and swell
 - C. Sea water characteristics
 - 1. Physical properties
 - a. General
 - b. Sector 1
 - (1) Temperature
 - (2) Salinity
 - (3) Density
 - (4) Relative buoyancy
 - (5) Electrical conductivity
- D. Submarine geology
 - 1. General
 - 2. Bathymetry
 - 3. Bottom sediments
 - a. Type and distribution
 - b. Thickness
 - 4. Geophysics
 - a. Gravity
 - b. Seismology
 - c. Magnetic anomalies
- E. Marine biology
 - 1. Fouling
 - 2. Borers
 - 3. Algae
 - 4. Bioluminescence
 - 5. Dangerous animals
 - 6. Human survival in water
 - 7. Sonic animals
 - 8. Deep scattering layer
- F. Map appraisal and comments on principal sources
 - 1. Map and chart appraisal
 - 2. Comments on principal sources

OUTLINE GUIDE

The following outline guide indicates substance and general arrangement. In preparation and typing of manuscript, D/B Editorial Instructions are to be followed in detail.

The Special NIS on Marine Climate and Oceanography divides the world sea areas into ocean basins. These ocean basins are further subdivided into Parts, each of which is comparable to a chapter in the other NIS. Each Part will consist of three sections; however, the production unit will be a Part.

Ocean Basins are designated as follows:

NIS 104	Atlantic Basin	12 Parts
NIS 105	Pacific Basin	12 Parts
NIS 106	Indian Basin	4 Parts
NIS 107	Arctic Basin	1 Part
NIS 108	Antarctic Basin	1 Part

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PAGE 1

Section 1. Introduction

Brief synopsis and overview treatment of only the most significant aspects of location, size, shape, general climatic and oceanographic conditions, as they affect the Area's strategic potential, both of-

fensive and defensive. The treatment should not be confined to boundaries of the NIS Area when proper appreciation requires overlapping into an adjacent area.

Section 2. Marine Climate

A. Climatic controls

Discuss and identify the climate and climatic controls of the NIS Area, including general circulation and pressure distribution, air masses and fronts, land and maritime influences, and energy exchange.

B. Surface winds

Discuss and show by use of wind roses or other graphic means by months the distribution of wind force and direction.

C. Surface air temperature

Discuss and show by graphic means by months the mean, mean maximum, mean minimum, absolute maximum, and absolute minimum temperatures and/or percentile cut-off points of the temperature distribution (normally 5 percentile) for maximum and minimum temperatures. Discuss or show by graphic means by months the frequency and distribution of temperatures below freezing and the occurrence of snow.

D. Precipitation

Discuss and show by graphic means by months the distribution, amount, and frequency of precipitation of all types.

E. Cloudiness

Discuss and show by graphic means the distribution and frequency by months of low cloud amount (when data are available) and total cloud amount. Discuss the dominant types and their causes. (When appropriate, cloudiness may be treated in combination with precipitation in Subsection D, above, under the revised heading, Precipitation and cloudiness.)

F. Visibility and fog

Discuss and show by graphic means by months the distribution and frequency of reduced visibility. Discuss and/or show by graphic means the distribution and frequency of fog.

G. Special weather phenomena

Discuss and/or show by graphic means the occurrence of tropical and extratropical cyclones, squalls, waterspouts, thunderstorms, and any other phenomena of special importance or peculiar to the given NIS Area.

H. Weather and military operations

Discuss the effects of weather and climate of the Area on air and surface military operations.

I. Map appraisal and comments on principal sources

1. MAP AND CHART APPRAISAL

An itemized discussion of the principal marine climatic charts of the Area.

2. COMMENTS ON PRINCIPAL SOURCES

This Subsection is to serve the following purposes:

1) To provide an evaluation of the principal source material used in preparing the Section, and thereby inform the user of the general credibility to be accorded the intelligence contained in the Section.

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Section 3. Oceanography

A. General circulation

A discussion of the general circulation of surface and subsurface currents illustrated by means of current vectors or streamlines, depending on data available. One or more charts to be included according to seasonal change or other variation in the circulation pattern.

B. Sea and swell

A discussion of the distribution of wave heights due to sea and swell and also the directions of the sea and swell by month or season. The distribution of the directions of sea and swell will be shown to eight points of the compass by means of roses and the distribution of wave heights by histograms.

C. Sea water characteristics

1. PHYSICAL PROPERTIES

a. GENERAL — A discussion of the general physical properties of the NIS Area illustrated by charts of isolines of temperature, salinity, and density, a chart of relative buoyancy, a diagram of electrical conductivity, and a chart of color and transparency. Number of charts to be included will be determined by seasonal changes or other variations of the physical properties.

b. SECTOR 1 — (Sector breakdown is made on the basis of variations within the NIS Area and the presence of isolated water bodies within the Area. The number of sectors will vary from one Special NIS to another.)

(1) *Temperature* — A discussion of the temperature structure of the sector, illustrated by isoline charts in vertical planes.

(2) *Salinity* — A brief discussion of the salinity of the sector, illustrated by isoline charts in vertical planes.

(3) *Density* — A brief discussion of the density of the sector, illustrated by isoline charts in vertical planes.

(4) *Relative buoyancy* — A brief text describing the relative buoyancy at various depths in the sector, illustrated by vertical isoline charts.

(5) *Electrical conductivity* — A brief discussion of the electrical conductivity of the sea water of the sector, which may or may not be illustrated by a chart of maximum and minimum conductivities, dependent upon the amount of variation of this property.

(6) *Color* — A brief discussion of the water color of the sector.

(7) *Transparency* — A brief discussion of the visual transparency of the water.

c. SECTOR 2 (same subheadings as for Sector 1)

2. ICE

Description of ice conditions in the area with reference to the temperature charts. If the ice conditions are sufficiently complicated, the position of various kinds of ice will be shown by isoline charts for average and severe winters.

3. SOUND CONDITIONS

a. SONAR — A discussion of sound ranging, detailing echo and sound ranges in the Area. The text will be illustrated by bar or other types of diagrams of ranges over various types of bottoms.

b. SOFAR — A brief discussion, without illustration, stating whether or not a sofar channel exists in the Area, and at what level it is likely to be found.

D. Submarine geology

1. GENERAL

A general discussion of the geological structural features of the Area and the mode of formation of the various sea sectors.

2. BATHYMETRY

A discussion of the type and distribution of topographic features illustrated by bathymetric charts.

3. BOTTOM SEDIMENTS

a. TYPE AND DISTRIBUTION — This part of the text will either be illustrated by a bottom sediment chart or will refer to existing H.O. bottom sediment charts.

b. THICKNESS — Text may or may not be illustrated by charts and diagrams, depending on the continuity of the available data.

4. GEOPHYSICS

a. GRAVITY — A discussion of the gravity anomalies of the Area, illustrated by charts of observed free air and isostatic gravity values.

b. SEISMOLOGY — A discussion of earthquakes, volcanoes, and tsunamis, illustrated by charts of seismic belts.

c. MAGNETIC ANOMALIES — A discussion of magnetic anomalies, illustrated by chart of positive and negative magnetic values.

E. Marine biology

1. FOULING

A discussion of fouling in the Area, with emphasis on seasonal variation of attachment and distribution, illustrated by a chart or table if the data are adequate.

2. BORERS

A discussion of the marine boring organisms of the Area, with emphasis on distribution and seasonal variations of attack.

3. ALGAE

A description of the forms of algae and other marine plants found and the water depths to which they extend.

4. BIOLUMINESCENCE

A discussion of the likelihood of occurrence and intensity of bioluminescence and the marine organisms causing the phenomenon.

5. DANGEROUS ANIMALS

A short description of the outstanding dangerous marine animals, with mention of distribution and method of attack.

6. HUMAN SURVIVAL IN WATER

A brief discussion and chart of the length of time a human can survive largely immersed in the sea.

7. SONIC ANIMALS

A brief discussion of distribution and concentration of sonic marine animals.

8. DEEP SCATTERING LAYER

A brief discussion of the occurrence of the deep sound-scattering layer, describing records of the depth and location of deep scattering.

F. Map appraisal and comments on principal sources**1. MAP AND CHART APPRAISAL**

An itemized discussion of the principal oceanographic charts of the Area.

2. COMMENTS ON PRINCIPAL SOURCES

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